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WILLIS L. MOORE, Chief U. S. Weather Bureau.

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Climatological Data for November, 1910.
DISTRICT No. 1, NORTH ATLANTIC STATES.

WILFORD M. WILSON, District Editor.

GENERAL SUMMARY.

November, 1910, was a notable month in many respects. The temperature was below normal, except in Maine, almost continuously throughout the month, with a deficiency over the southern part of the district averaging 5° daily. No marked warm or cold periods occurred, the remarkable uniformity of temperature during the greater part of the month being very unusual at this season. The change in temperature from day to night was small, the cloudiness excessive, and, although the total precipitation was slightly below the normal, except in New York and New Jersey, the number of days on which rain or snow occurred was unusually large in most parts of the district.

The storm of the 3d and 4th was the only disturbance worthy of note that occurred within the month. On the morning of the 3d this disturbance was central over the Atlantic Ocean east of Cape Hatteras, causing strong easterly winds on the coast as far north as New England, with general precipitation over the southern part of the district. Its movement northward along the coast during the succeeding 36 hours brought the entire district within its influence, resulting in general, and, in many localities, especially near the coast, excessive precipitation. The rains that occurred from this storm were very beneficial, relieving the drought in the central part of the district and replenishing the reservoirs that had reached an alarmingly low stage in many places.

TEMPERATURE.

The average temperature for the district was 38.1°, which is about 3.4° below normal and about 6° below that of the same month last year. The mean temperature ranged from 40.7° in the Maryland and Delaware section to 35.4° in New York. At a few stations in New England the average temperature was normal or slightly above; but for the remainder of the district the deficiency was marked, and increased gradually southward to Virginia, where the average daily deficiency was about 5°, while at a few individual stations it reached nearly 8°. In this respect, the temperature conditions were in marked contrast with those of November last year, which was one of the warmest Novembers on record.

The month opened rather warm and the highest temperature of the month was recorded at most stations from the 1st to the 3d; but, aside from these few warm days and the relatively high temperatures that occurred about the close of the first decade, the month as a whole was remarkable for the absence of periods of either high or low temperatures. This rather remarkable uniformity of temperature persisted throughout the month, the change to colder as the season advanced being reached by gradual stages. The lowest temperatures of the month occurred generally at the beginning of the third decade, although the lowest temperature recorded in New England (4°) occurred at Jacksonville, Vt., on the 27th.

PRECIPITATION.

The average precipitation for the district was 2.56 inches, which is slightly below the November normal, but considerably more than occurred during November last year. In New York and New Jersey the precipitation was slightly in excess of the normal, but for the remainder of the district there was a considerable deficiency. The deficiency was least in Pennsylvania and greatest in Virginia, where the monthly rainfall was little more than half the usual amount.

In the central and northern parts of the district a large part of the monthly precipitation resulted from the storm that moved up the coast during the 3d and 4th. Rains were general from this storm over the entire district, but excessive precipitation was not recorded except near the coast from New Jersey northward. The following stations reported excessive precipitation, 2.50 inches or more in 24 hours: Jersey City, N. J., 3.33; Newark, N. J., 2.58; Bedford, N. Y., 2.60; Cutchogue, N. Y., 2.55; New York City, 3.16; Windham, N. Y., 3.02; Blue Hill, Mass., 3.27; Chestnut Hill, Mass., 2.63; Block Island, R. I., 3.77; Kingston, R. I., 2.60; Canton, Conn., 5.04 inches.

For the remainder of the month light rain and snow occurred at frequent intervals throughout the district, the days of most general precipitation being the 10th in the central and southern sections, and the 29th and 30th over nearly all parts of the district.

The snowfall during the month was perhaps the heaviest for the month of November for many years, especially in parts of Pennsylvania and New York. Most of the precipitation that occurred with the storm of the 3d and 4th over the interior was in the form of snow, and some unusually heavy falls for so early in the season were reported. In southeastern New York, Binghamton reported 21 inches; Newark Valley, 14 inches; Oxford, Norwich, and Windham, each 12 inches; Liberty, 9 inches; and De Ruyter, 8 inches, while equally heavy falls occurred in the northeastern part of Pennsylvania. In some localities the accumulation of snow and sleet on fruit trees caused considerable damage. At the close of the month the depth of snow on the ground in New England ranged from 4 to 8 inches, and in New York from about 10 inches in the Adirondack region to about 3 inches along the southern border, while in the southern part of the district little remained on the ground except in the elevated sections.

RIVER CONDITIONS.

Very low river stages prevailed in the Delaware system at the beginning of the month. At Trenton, N. J., the gage reading on the first 3 days was 0, or lower than any stage recorded at that station for more than 6 years. At Port Jervis, and Phillipsburg, also on the Delaware River, the water was within 2 or 3 inches of the lowest stage for a similar period. In other parts of the district, the river stages were nearer the normal, or even slightly above at some stations on the upper Hudson. For several days after the heavy rains and snows of the 3d and 4th, the rivers rose gradually in all parts of the district, but as the heaviest rains occurred near the coast, only moderate stages resulted in the principal streams.

The variation in stream flow was unusually small, considering the amount of precipitation that occurred within the month. This was due partly to the remarkable frequency of light precipitation in the northern part of the district, where the principal streams rise, and partly to the fact that there was an unusual amount of snowfall with comparatively little thawing weather. The highest stages occurred generally between the 6th and 12th, after which the rivers fell slowly reaching low stages again at the close of the month, particularly in Maine, New Hampshire, and Vermont, where the water became about as low or lower than on the 1st. In these States, users of waterpower were obliged to suspend operations during much of the month,

but in other sections the water supply was ample for practically all needs.

SUNSHINE.

The sunshine was very unevenly distributed, and for the greater part of the district the month was exceptionally cloudy. Considerable clear weather occurred near the coast from Connecticut southward, where the percentage of sunshine ranged from 40 to 60, but inland and farther north there was a gradual increase in cloudiness and the percentage of sunshine fell to remarkably low figures: At Ithaca, N. Y., (which is just outside the district) it was 12; at Albany, N. Y., 20; at Providence, R. I., 33; and at Eastport, Me., 26. At Binghamton, N. Y., it was only 8, which is the lowest of record for any month since the station was established. Over an extensive area including parts of Pennsylvania, New York, and all the New England States, the number of clear days in the month ranged from none to about 4, but reached 12 or more at many stations in Maryland, Delaware, and southern New York. The total number of hours of sunshine for the month averaged 120, and the percentage 40.

TABLE 1.—*Climatological data for November, 1910. District No. 1, North Atlantic States.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Maine.																			
Bar Harbor	Hancock	20	24	38.0	−0.9	59	3	21	10	28	2.00	−3.15	0.45	1.0	12	8	7	15	se.	Wm. Miller.
Cornish	York	778	55	37.4	+2.3	60	1	12	21	40	2.62	−0.97	0.64	9.8	9	9	10	11	nw.	T. H. West.
Eastport	Washington	53	38	37.5	+0.7	51	11	23	21	20	2.14	−1.94	0.50	10.3	13	2	7	21	w.	U. S. Weather Bureau.
Ellsworth	Hancock	.....	0	35.6	.....	54	4	17	21	26	2.15	.....	0.39	1.0	13	10	5	15	w.	S. P. Sutton.
Fairfield	Somerset	90	25	35.8	−0.4	55	1†	15	21	32	1.53	−1.86	0.54	5.5	5	14	5	11	.....	Edward F. Parker.
Farmington	Franklin	450	13	35.7	+2.6	61	3	12	21	38	2.31	−2.05	0.95	11.0	10	3	11	16	.....	State Normal School.
Gardiner	Kennebec	163	18	36.2	−0.5	57	1	15	21	34	2.70	−1.46	1.00	7.0	14	11	2	17	ne.	Samuel D. Soule.
Greenville	Piscataquis	1,000	6	31.4	.....	52	1	15	21	29	3.21	.....	1.20	23.7	13	.....	.....	.....	.....	U. S. Weather Bureau.
Houlton	Aroostook	302	8	33.2	.....	51	3	17	21†	27	1.42	.....	1.02	10.0	6	10	3	17	ne.	Bangor & Aroostook R. R.
Lewiston	Androscoggin	185	36	36.8	+1.1	58	1	19	21	32	2.18	−2.25	0.60	6.5	11	7	7	16	nw.	Union Water Power Co.
Madison	Somerset	257	7	33.5	.....	56	4	14	22	30	2.87	.....	1.44	9.5	6	10	6	14	e.	Wm. Jardine.
Millinocket	Penobscot	386	7	32.3	.....	54	1	19	22	32	2.86	.....	1.29	12.8	11	5	1	24	nw.	H. S. Ferguson.
North Bridgeton	Cumberland	450	17	36.6	−0.4	59	1	17	21	35	2.51	−2.55	0.68	6.5	9	4	16	10	ne.	G. E. Chadbourne.
Orono	Penobscot	129	41	35.0	+0.8	56	1	15	21	35	1.42	−2.75	0.58	4.2	10	3	7	20	ne.	Agricultural Exp. Station.
Patten	....do	550	8	32.0	.....	52	1†	11	1	41	2.36	.....	0.80	13.4	11	4•	4•	21•	w.	Bangor & Aroostook R. R.
Portland	Cumberland	99	39	37.4	−0.2	54	1	23	21	23	1.85	−1.95	0.61	0.6	9	9	8	13	w.	U. S. Weather Bureau.
Presque Isle	Aroostook	.....	0	32.8	.....	55	1	14	22	35	2.78	.....	1.40	7.0	12	4•	3•	22•	n.	San Lorenzo Merriman.
Rumford Falls	Oxford	505	17	35.2	+1.1	53	5	16	21	25	2.28	−2.45	0.72	10.1	10	12	7	11	nw.	Chas. A. Mixer.
Winslow	Kennebec	90	15	34.5	.....	60	6	10	21	38	2.43	.....	1.30	4.5	8	9	12	9	w.	Hollingsw'th & Whitney Co.
New Hampshire.																				
Alstead Center	Cheshire	1,120	6	33.5	.....	53	2	15	21	23	3.80	.....	1.19	15.2	10	14	5	11	nw.	Frank Dewing.
Benton	Grafton	.....	0	30.6	.....	53	1	13	21	37	2.31	.....	1.02	12.5	9	5	9	16	nw.	N. H. State Sanitorium.
Bethlehem	....do	1,470	18	31.1	−1.5	53	1†	10	21	28	2.19	−1.52	0.80	14.0	10	5	5	20	w.	Benjamin Tucker.
Concord	Merrimack	350	50	36.5	−0.3	56	2	15	21	31	2.60	−0.79	1.12	4.8	8	4	11	15	nw.	U. S. Weather Bureau.
Durham	Stafford	88	15	36.8	−2.2	55	1	14	21	33	2.01	−2.47	0.60	.....	7	12	8	10	nw.	Agricultural Exp. Station.
Franklin	Merrimack	440	11	36.3	.....	57	1	14	21	35	2.64	.....	1.10	4.5	10	10	6	14	nw.	Dr. C. P. Webster.
Grafton	Grafton	863	24	33.7	−0.5	54	1	8	21	29	2.82	−0.80	1.28	10.0	11	9	6	15	nw.	Perley R. Kimball.
Hanover	....do	603	76	34.0	−0.4	63	2	12	21	37	2.49	−0.54	0.98	9.3	8	2	6	22	nw.	Dartmouth College.
Keene	Cheshire	506	25	35.9	−0.8	58	2	11	21	33	3.04	−0.88	1.08	7.8	10	5	7	18	nw.	Samuel Wadsworth.
Nashua	Hillsboro	125	25	38.2	−0.0	57	2	17	21	31	3.05	−0.93	1.23	4.0	10	8	10	12	nw.	Jackson Co.
Newton	Rockingham	.....	22	36.6	−1.2	56	2	11	21	34	2.76	−1.41	1.36	0.5	6	6	17	7	nw.	W. C. Gale.
Plymouth	Grafton	500	22	34.5	+1.8	52	1	12	21	34	2.28	−1.64	0.94	4.5	7	10	2	18	w.	Mrs. Hattie G. Trow.
Vermont.																				
Bloomfield	Essex	.....	3	32.5	.....	58	5	5	21	33	1.44	.....	0.53	7.0	11	4	9	17	s.	Lyman Falls L. & P. Co.
Cavendish	Windsor	910	7	33.6•	.....	54	2	10	22	26	3.03	.....	1.10	11.0	10	8•	3•	16•	w.	Miss M. A. Kingsbury.
Chelsea	Orange	830	15	32.4	−0.8	53	1	10	21	35	1.94	−2.24	0.66	12.0	9	3	7	20	n.	W. F. Dewey.
Jacksonville	Windham	1,000	25	27.8	−6.1	53	3	4	27	35	3.44	−1.34	1.15	19.3	10	10	11	9	sw.	Miss Martha French.
Manchester	Bennington	960	11	33.0	.....	57	2	11	21	30	2.63	.....	1.07	9.0	9	4	7	19	sw.	N. M. Canfield.
St. Johnsbury	Caledonia	711	17	33.8	+0.5	55	2	12	21	33	2.37	−1.59	1.02	8.9	9	5	3	22	nw.	Fairbanks Museum.
Woodstock	Windsor	700	18	33.6	−0.2	54	2	13	21	33	2.44	−1.09	1.11	11.5	4	2	4	24	.....	John S. Eaton.
Massachusetts.																				
Amherst	Hampshire	222	21	37.2	−1.1	61	2	15	21	35	3.69	−0.16	1.01	4.0	8	5	15	10	nw.	Agricultural Exp. Station.
Blue Hill	Norfolk	640	26	37.2	−2.5	57	2	20	20	17	5.39	+0.77	3.27	2.0	9	7	6	17	w.	Blue Hill Observatory.
Boston	Suffolk	124	40	41.2	−0.3	61	2	26	20	20	3.75	−0.28	1.80	1.4	8	3	12	15	w.	U. S. Weather Bureau.
Chestnut Hill	....do	124	30	39.4	−1.9	62	2	19	21	29	5.77	+1.19	2.63	1.5	8	15	5	10	.....	Metropolitan Water Board.
Clinton	Worcester	370	14	37.8	.....	58	2	19	20	27	4.52	.....	1.76	5.5	7	17	1	12	.....	Do.
Concord	Middlesex	139	20	37.0	−1.1	59	2	13	21	36	3.52	+0.29	1.12	4.0	9	3	12	15	nw.	Fred. A. Tower.
Fall River	Bristol	200	44	40.4	−2.5	59	2†	22	20	18	3.54	−1.22	1.53	T.	11	5	20	5	nw.	C. V. S. Remington.
Fitchburg	Worcester	550	27	37.6	−0.8	57	2	17	21	30	2.69	−1.70	0.69	8.0	8	13	5	12	nw.	Dr. A. P. Mason.
Framingham	Middlesex	160	30	38.4	−2.3	60	2	15	21	32	4.02	−0.23	1.67	2.0	7	.....	.....	.....	.....	Metropolitan Water Board.
Hyannis	Barnstable	31	19	40.9	−4.0	58	10	26	20	20	3.86	−1.17	1.56	T.	15	10	12	8	nw.	C. F. Sleeper.
Lawrence	Essex	51	26	37.4	−2.5	58	2	17	21	30	2.73	−1.47	0.65	1.0	8	3	22	5	nw.	Essex Company.
Lowell	Middlesex	100	25	38.6	−0.9	59	2	17	21	30	3.47	−0.54	1.51	.....	9	.....	.....	.....	.....	Prop's Locks and Canals.
Middleboro	Plymouth	53	24	37.4	−2.9	60	2	11	21	37	4.33	−0.25	2.07	0.1	11	2	12	16	w.	A. R. Gurney.
Monson	Hampden	420	26	37.3	−1.6	60	2	13	21	32	3.97	−0.33	1.00	8.0	11	11	10	9	nw.	Dr. G. E. Fuller.
Nantucket	Nantucket	15	24	43.0	−2.2	59	10	30	20	17	3.46	+0.18	1.15	T.	14	3	15	12	w.	U. S. Weather Bureau.
New Bedford	Bristol	88	98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	City Engineer.
Norfolk	Norfolk	244	7	39.6•	.....	64	2	12	21	37	5.91	.....	1.70	2.4	7	13•	9•	5•	w.	Miss Ruby H. Martyn.
Northampton	Hampshire	205	2	38.4	.....	61	2	18	1	34	3.44	.....	1.40	3.0	9	9	8	13	nw.	D. E. Hoxie.
Plymouth	Plymouth	.....	25	38.8	.....	60	3	20	20	23	5.00	.....	2.22	T.	10	13	4	13	w.	Miss Laura B. Knapp.
Provincetown	Barnstable	40	23	42.4	−1.5	60	4	30	20	15	3.45	−0.15	1.72	.....	8	18	0	12	w.	Gideon Bowley.
Rockport	Essex	25	8	40.6	.....	55	1	27	21	18	4.11	.....	1.00	0	8	7	10	13	nw.	C. F. B. Bearse.
Rutland	Worcester	1,160	8	34.6	.....	54	1†	20	19	21	3.86	.....	1.23	14.3	9	6	9	15	sw.	State Sanatorium.
South Egremont	Berkshire	764	8	32.0	.....	60	2	10	21	32	4.37	.....	0.75	20.8	15	.....	.....	.....	nw.	Roscoe C. Taft.
Turners Falls	Franklin	200	19	36.6	−0.6	57	2	13	21	25	3.55	+0.49	1.23	3.5	7	.....	.....	.....	.....	Turners Falls Co.
Westboro	Worcester	298	36	39.0	−0.8	59	2	20	20†	33	4.56	+0.42	1.50	4.0	6	.....	.....	.....	.....	G. S. Newcomb.
Williamstown	Berkshire	711	19	34.6	−3.0	57	2	12	21	28	3.61	+0.08	0.95	18.2	19	2	7	21	w.	Williams College.
Worcester	Worcester	518	18	38.2	−2.4	56	2	25	21	25	2.90	−2.48	1.27	5.5	9	5	12	13	w.	G. W. Swan.
Rhode Island.																				
Block Island	Newport	26	30	43.0	−2.3	60	10	27	20	17	5.58	+1.70	3.77	T.	13	8	11	11	nw.	U. S. Weather Bureau.
Bristol	Bristol	53	24	41.4	−2.4	58	2	25	21†	19	4.23	+0.26	2.00	T.	9	10	12	8	nw.	N. G. Herreshoff.
Kingston	Washington	250	21	38.2	−2.9	60	2†	17	25	26	5.47	+0.39	2.60	T.	8	5	16	9	w.	Nathaniel Helme.
Narragansett Pier	Newport	22	28	40.3	−2.8	60	1†	19	20	26	4.45	+0.09	2.19	T.	8	21	3	6	w.	U. S. Weather Bureau.
Providence	Providence	182	6	39.8	−0.6	58	10	21	20	26	3.37	−0.73	1.55	0.8	10	6	11	13	nw.	Do.
Connecticut.																				
Bridgeport	Fairfield	20	17	41.0	.....	62	2	21	21	28	3.93	.....	1.65	2.5	8	7	16	7	nw.	William Jennings.
Canton	Hartford	900	49	37.6	−1.3	58	10	16	21	31	6.02	+1.41	5.04	2.5	8	9	8	13	nw.	G. J. Case.
Colchester	New London	370	24	36.9	−4.2	59	1	14	21	33	4.72	−0.14	1.75	4.8	8	6	14	10	w.	S. P. Willard.
Cream Hill	Litchfield	1,300	14	33.8	−2.9	59	1	18	20	23	5.39	+1.99	1.49	12.9	16	7	3	20	w.	C. L. Gold.
Danielson	Windham	300	8	37.3	.....	59	2	13	21	29	3.19	.....	1.70	2.0	5	13	10	7	n.	F. E. Bitgood.
Hartford	Hartford	159	6	39.2	−0.3	60	2†	22	20†	28	4.36	+0.54	1.83	3.3	11	2	12	16	nw.	U. S. Weather Bureau.
Hawleyville	Fairfield	600	12	38.4	−1.2	64	2	16	21	36	5.04	+1.91	1.60	4.5	8	10	10	10	w.	Edson N. Hawley.
New Haven	New Haven	107	123	40.7	−0.6	62	10	23	20	25	4.56	+0.98	2.06	4.1	10	10	12	8	w.	U. S. Weather Bureau.
New London	New London	47	40	41.9	−0.3	60	10	22	21	27	4.60	+0.50	1.95	T.	7	10	13	7	nw.	Thos. C. Dillon.
North Grosvenor Dale	Windham	400	20	37.4	−2.0	60	1†	13	20	33	2.61	−2.41	0.95	(?)	8	9	10	11	w.	Grosvenor Dale Co.
Norwalk	Fairfield	116	20	38.3	−2.0	64	?	16	21	33	3.93	−0.65	2.00	1.0	6	10	13	7	nw.	Geo. C. Comstock.
Southington	Hartford	140	41	38.4	0.0	61	2	17	20	33	4.75	+0.87	1.80	7.5	9	4	19	7	nw.	Luman Andrews.
Storrs	Tolland	640	22	38.0	−0.9	58	8	17	20	32	3.51	−0.93	1.43	6.0	4	8•	2•	19•	w.	Agricultural Exp. Station.
Voluntown	New London	260	25	37.8•	−3.5	60	1†	9	21	41	4.03	−0.95	1.73	T.	7	2•	8•	8•	w.	F. S. Bitgood.
Waterbury	New Haven	400	35	39.0	−1.6	62	1	16	21	32	5.40	+1.01	1.82	4.0	11	.....	.....	.....	.....	N. J. Welton.
New York.																				
Addison	Steuben	1,000	20	35.9	−2.9	64	1	17	21	40	2.11	+0.17	0.50	9.0	14	4	5	21	w.	H. R. Ainsworth.
Albany	Albany	97	89	37.4	−1.0	60	2	19	21	30	2.74	−0.06	0.74	4.3	14	3	6	21	nw.	U. S. Weather Bureau.
Alfred	Allegany	1,976	15	31.8	−4.5	60	1	19	30†	29	3.60	+0.71	0.55	26.5	19	.....	.....	.....	.....	F. S. Place.
Amsterdam	Montgomery	277	6	34.0	.....	55	1	15	21	30	3.01	.....	1.20	10.7	8	11	2	17	w.	Emery Elwood.
Athens	Greene	90	8	37.8	.....	63	2	16	21	32	2.80	.....	1.16	2.5	8	4	8	18	nw.	E. C. Brooks.
Ballston Lake	Saratoga	400	6	35.0	.....	56	1†	12	21	34	2.54	.....	0.79	7.0	11	6	7	17	w.	Geo. R. Schauber.
Bedford	Westchester	450	19	40.4	−0.7	69	3	17	21	33	5.08	+1.42	2.60	2.0	9	11	14	5	.....	Dr. L. Rosenberg.

TABLE 1.—*Climatological data for November, 1910. District No. 1*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
New York—Continued.																			
Binghamton	Broome	875	19	34.2	− 3.4	55	10	19	21	36	4.02	+ 1.75	2.20	32.9	20	0	6	24	w.	U. S. Weather Bureau.
Bouckville	Madison	1,350	13	31.1	− 2.8	53	1	12	21	24	3.22	+ 0.27	0.51	27.5	19	1	5	24	nw.	L. W. Griswold.
Boyds Corners	Putnam	560	28								3.97	+ 0.35								Thomas Manning.
Carmel	do	500	18	36.7	− 3.5	62	3	15	21	26	4.81	+ 1.30	1.89	3.0	10	18	4	8	nw.	Do.
Chatham	Columbia	470	9	36.0	.....	62	2	15	21	29	2.66	.....	0.98	6.3	14	5	7	18	n.	Morton R. Tank.
Cooperstown	Otsego	1,250	56	32.7	− 2.3	56	10	12	20	24	2.73	− 0.31	0.57	20.0	16	3	8	19	w.	Elizabeth C. Keese.
Corinth	Saratoga	542	8								2.40		0.55		6					A. M. Hollister.
Cortland	Cortland	1,129	48	34.3	− 1.9	56	1†	17	21	26	3.26	+ 0.12	0.63	19.0	19	2	5	23	nw.	F. G. Baker.
Cutchogue	Suffolk	32	33	41.5	− 1.6	63	1	23	21	28	6.33	+ 3.64	2.55	T.	6	6	20	4	nw.	Wm. A. Fleet.
De Ruyter	Madison	1,300	7	33.6	.....	57	1	8	21	31	3.94	.....	0.90	31.2	15	3	2	25	w.	B. D. Crandall.
Easton	Washington		20								1.70	− 0.94		10.0						H. Taber.
Elmira	Chemung	863	31	36.6	− 2.9	64	2	21	20	36	2.09	+ 0.11	1.04	.....	9	0	8	22	nw.	Gerity Bros.
Fort Hunter	Montgomery	280	2																	C. E. Wing.
Fort Plain	do	316	6	36.1	.....	57	2	18	21	28	3.80	.....	1.06	.....	18	2	8	20	w.	Abram Devendorf.
Glens Falls	Warren	340	19	36.2	+ 0.3	56	2	15	21	31	2.09	− 1.08	0.78	9.0	9	4	10	16	w.	Prof. C. L. Williams.
Gloversville	Fulton	850	18	33.2	− 1.5	54	1	13	21	30	2.79	− 0.50	0.57	13.2	16	2	12	16	w.	W. L. McLean.
Greenfield Center	Saratoga	314	12	34.5	− 1.1	55	1†	13	21	30	2.00	− 0.46	0.50	6.0	10	6	10	14	w.	S. E. Darrow.
Greenwich	Washington	425	13	36.1	+ 0.5	59	2	17	21	29	2.54	− 0.02	1.07	8.0	14	6	17	7	n.	Homer J. Whitcomb.
Griffin Corners	Delaware	2,260	10																	Kelsey H. Kelly.
Haskinville	Steuben		15								2.39	− 0.03	0.45	14.8	15					W. G. Collins.
Homer	Cortland		2	32.9	− 3.3	57	1	12	21	30	3.83	.....	0.69	17.7	20	4	3	23	nw.	Charles C. Mortimer.
Hoosick Falls	Rensselaer	410	8								3.97	.....	1.79	9.2	15	10	3	17	nw.	Sanford L. Cluett.
Indian Lake	Hamilton	1,705	11	30.2[e]	− 2.4	52	2	4	21	31[e]						11	7	12	nw.	Lester Severie.
Jeffersonville	Sullivan	1,240	7	34.9	.....	66	10	13	20	34	2.94	.....	0.94	13.0	12	4	17	9	w.	Chas. Wilfert, jr.
Lake Pleasant	Hamilton		3	28.4	.....	54	1	12	19†	28	2.40	.....	0.50	.....	9					Willet Lawrence.
Liberty	Sullivan	2,300	28	32.4	− 2.6	59	11	19	18	34	2.72	− 0.60	0.90	18.5	6	7	3	20	nw.	Dr. H. M. King.
Little Falls	Herkimer	924	12	32.1	− 2.8	52	1†	14	21	23	3.08	+ 0.33	0.56	19.0	15	4	12	14	w.	O. J. Dempster.
Mohonk Lake	Ulster	1,245	14	36.2	− 2.4	61	2	20	20†	26	4.54	+ 1.78	1.52	7.8	6	13	10	7	nw.	Albert K. Smiley.
Morehouseville	Hamilton	1,697	2	30.0	.....	54	2	8	21	28	3.21	.....	0.50	27.0	23	4	3	23	w.	Theodore C. Remonda.
Mount Hope	Westchester	200	13																	Wm. A. Cornelius.
Newark Valley	Tioga	825	23								3.58	+ 1.18	1.17	32.0	15	6	2	22		M. D. Clinton.
New Berlin	Chenango		3								2.60	.....	0.51	13.5	20	1	3	26	w.	Roger Greene.
New Lisbon	Otsego	1,234	20	31.2	− 2.9	59	10	7	21	35	2.71	+ 0.19	0.83	16.0	16	4	3	23	sw.	G. A. Yates.
New York City	New York	314	85	41.6	− 2.4	65	2	29	20	17	4.62	+ 1.18	3.16	T.	8	2	14	14	w.	U. S. Weather Bureau.
North Creek	Warren	1,002	2	33.8	.....	54	1†	12	21	31						4	10	16	nw.	W. G. Kenwell.
Northville	Fulton	742	8								1.95	.....	0.45	6.0	9					P. C. Pickard.
Norwich	Chenango	1,015	4	34.7[d]		54	1†	16	21	27[d]										P. L. Clark.
Oneonta	Otsego	1,112	16	34.4	− 3.8	67	1	14	21	42	2.42	− 0.24	0.68	15.2	12	3	4	23	nw.	H. W. Lee.
Oxford	Chenango	916	45	34.4	− 1.3	56	1	16	21	30	3.87	+ 1.09	1.00	19.5	15	2	5	23	w.	John P. Davis.
Port Jervis	Orange	470	26	37.2	− 1.3	62	2†	14	21	34	3.78	+ 0.81	1.16	2.0	9	4	16	10	nw.	Prof. John M. Dolph.
Salisbury	Herkimer	1,526	13	30.5	− 4.0	54	1	8	21	30	3.35	+ 0.03	0.45	2.4	13	11	4	15	w.	Joseph Ryan.
Salisbury Mills	Orange	314	11	37.6	.....	66	2	14	21	39	5.83	+ 3.42		T.		12	8	10	w.	H. P. Ramsdell.
Scarsdale	Westchester	200	6	40.4	.....	68	2	20	20	34	3.58	.....	2.00	0.8	6	18	6	6	nw.	C. H. Wilmarth.
Setauket	Suffolk	40	25	42.0	− 2.1	63	2	25	21	23	4.86	+ 1.01	1.88	0.4	10	13	10	7	w.	Selah B. Strong.
Sherburne	Chenango		3								2.19		0.41	13.8	8					E. B. Collins.
Southampton	Suffolk	36	9	42.0	.....	62	2	25	20†	23	5.14	.....	2.04	0.1	10	9	16	5	nw.	W. L. Jagger.
Southeast Reservoir	Putnam	310	15								5.07	+ 1.71								Thomas Manning.
Spier Falls	Saratoga	400	9	35.0[e]	.....	57[e]	2	12	21	30[e]	2.49	.....	0.95	7.0	8	12	11	7	sw.	W. F. Anderson.
Trenton Falls	Oneida	751	7								3.28		0.70	11.0	15					C. W. Young.
Tribeshill	Montgomery	268	7								3.70		2.00	10.0						R. S. Marshall.
Utica	Oneida	537	44								4.61	+ 0.70	0.69		11					W. E. Young.
Wading River	Suffolk	112	4	40.7		63	2†	18	21	32	5.17	.....	2.05	T.	10	18	6	6	nw.	H. B. Fullerton.
Wappingers Falls	Dutchess	110	20	38.0	− 1.7	62	2	16	21	26	3.16	− 0.11	0.82	4.0	7	7	16	7	n.	H. C. Townsend.
Warwick	Orange	538	16								5.50	+ 2.86	2.00	0.9	9					John W. Sly.
Waverly	Tioga	824	28	35.6	− 2.7	61	1	20	28	32	2.49	+ 0.13	0.55	17.4	17	1	8	21	w.	Hon. J. F. Shoemaker.
West Berne	Albany	946	11	33.6	− 2.2	58	1	9	21	39	1.91	− 0.63	0.40	15.0	9	2	5	23	nw.	W. J. Haverly.
West Point	Orange	167	61	38.6[e]	− 3.4	61	3	22	26	30[e]	4.46	+ 0.51	1.30	.....	9	17	6	7	nw.	Maj. Chas. M. Gandy.
Windham	Greene	1,520	10	33.0	− 3.3	59	10	10	21	36	6.23	+ 3.86	3.02	22.2	12	3	15	12	nw.	A. R. Mott.
Pennsylvania.																				
Altoona	Blair	1,181	22	40.4	+ 0.8	62	10	24	20	25	0.33	− 1.86	0.26	.....	7					C. W. Billin.
Bethlehem	Northampton	260	1																	Prof. E. C. Roest.
Clearfield	Clearfield	1,107	2	35.9	.....	63	1	20	27	36	3.30	.....	0.87	7.5	13	2	5	23	w.	Raymond C. Ogden.
Emporium	Cameron	1,050	22	35.6	− 3.8	61	1	16	21	33	2.40	− 0.46	0.42	6.8	12	1	5	24	w.	T. B. Lloyd.
Ephrata	Lancaster	384	11	37.7	− 4.8	61	1	17	21	32	2.23	+ 0.28	1.54	4.2	9	11	6	13	w.	W. L. Frantz.
Everett	Bedford	1,080	13	36.0	− 3.9	61	9	15	20	38	1.21	− 0.57	0.75	T.	3	4	20	6	nw.	B. L. Steckman.
George School	Bucks	184	4	40.3	.....	66	10†	21	20	35[e]	3.26	.....	1.47	T.	7	9	7	14	w.	Prof. A. C. Smedley.
Gettysburg	Adams	600	36	38.8	− 1.6	64	10	14	21	31	0.84	− 2.00	0.27	1.5	7	6	11	13	w.	Col. E. B. Cope.
Gordon	Schuylkill	804	7	36.2	.....	60	1	11	21	34	3.01	.....	1.46	2.2	14	5	11	14	w.	Capt. J. G. Johnson.
Hamburg	Berks	380	19	38.7	− 3.4	65	2	22	16	36	2.88	− 0.14	1.23	.....	5	8	12	10	nw.	W. J. Kalbach.
Harrisburg	Dauphin	361	22	39.2	− 3.5	61	1	25	21	25	0.83	− 1.29	0.48	3.0	10	2	13	15	w.	U. S. Weather Bureau.
Huntingdon	Huntingdon	650	22	37.8	− 3.6	63	1	16	21	38	1.56	− 0.92	0.45	3.0	10	3	6	21	w.	Prof. W. J. Swigart.
Hyndman	Bedford	977	4	36.8		66	9	12	20	46	0.93		0.56	T.	4	5	7	18	n.	H. C. Mauk.
Lawrenceville	Tioga	1,006	13	35.4[f]	− 3.2	64	1	15	23	39[f]	0.99	− 1.32	0.25	4.0	8	3[e]	1[e]	23[e]	.....	C. P. Darling.
Lebanon	Lebanon	458	22	39.2	− 2.8	61	1	24	21	25	2.81	− 0.32	0.95	12.4	13	5	13	12	nw.	G. W. Hayes, C. E.
Lock Haven	Clinton	560	22	38.4	− 3.1	61	1	19	21	32	1.74	− 1.00	0.85	2.9	11	1	6	23	w.	Prof. J. A. Robb.
Marion	Franklin	640	7	38.8	.....	63	10	14	20	31	1.11	.....	0.41	2.0	5	6	15	9	.....	Hon. C. B. Hege.
Mauch Chunk	Carbon	634	21	37.8	− 2.6	61	10	17	21	32	2.24	− 1.25	1.19	10.8	15	6	9	15	n.	F. C. Wintermute.
Mifflintown	Juniata	445	7	38.8	.....	66	4	16	21	36	1.09	.....	0.47	6.0	9	7	2	21	w.	Wellington Smith.
Milford	Pike	455	8	35.4	.....	65	1	12	21	42	5.49	.....	2.49	8.0	8	5	19	6	nw.	Mrs. Alla Doughty.
Montrose	Susquehanna	1,658	7	31.4	.....	56	2	15	8	21	2.64	.....	0.50	21.2	12				.....	J. R. Beebe.
Muncy Valley	Sullivan	519	1	36.4	.....	62	1	18	20	26	2.16	.....	0.80	16.0	8	7	0	23	.....	F. W. Buck.
New Germantown	Perry	873	7	37.5	.....	64	10	16	21	40	1.52	.....	0.70	3.0	5	4	2	24	w.	Ed. C. Johnston.
Philadelphia (1)	Philadelphia	117	40	43.2	− 1.7	66	10	30	21	21	3.65	+ 0.59	1.90	T.	10	3	15	12	nw.	U. S. Weather Bureau.
Pocono Lake	Monroe	1,662	9	32.2	.....	54	10	9	22	30	3.56	.....	0.90	26.0	11	4	4	22	w.	Pocono Lake Ice Co.
Reading	Berks	280	37	40.7	− 1.7	66	10	20	21	33	2.61	− 0.45	0.98		12					Franklin Yeager.
Scranton	Lackawanna	805	10	36.7	− 2.4	64	10	23	21	26	5.63	+ 3.49	3.18	16.7	13	2	5	23	sw.	U. S. Weather Bureau.
Selinsgrove	Snyder	455	22	38.3	− 3.3	62	1	18	21	34	2.39	− 0.44	0.86	10.2	12	1	13	16	nw.	J. M. Boyer, C. E.
State College	Center	1,191	22	35.8	− 3.7	63	26	21	21	33	1.68	− 0.93	0.73	7.3	12				w.	Prof. Wm. Frear.
Towanda	Bradford	754	16	35.4	− 3.6	61	1	18	21	37	2.45	+ 0.31	0.56	16.4	13	2	3	25	nw.	Hiram E. Bull, C. E.
Wellsboro	Tioga	1,327	33	34.3	− 3.4	60	1	17	21	38	2.13	− 0.92	0.87	8.5	11	2	13	15	w.	O. L. White.
West Chester	Chester	455	55	39.2	− 3.5	64	10	23	21	24	4.33	+ 0.51	1.65	3.7	11	10	4	16	nw.	J. C. Green, D. D. S.
Williamsport	Lycoming	530	20	38.5	− 1.8	59	1	23	21	28	1.35	− 0.93	0.66	1.0	9	3	8	19	nw.	Henry H. Guise.
New Jersey.																				
Asbury Park	Monmouth	22	22	42.6	− 1.6	62	2†	25	21	24	5.37	+ 2.10	2.21	T.	8	6	10	14	w.	B. H. Obert.
Atlantic City	Atlantic	16	37	42.4	− 3.1	64	2	26	20	21	2.32	− 0.91	1.32	T.	7	6	15	9	nw.	U. S. Weather Bureau.
Bayonne	Hudson	50	20	41.5	− 1.5	65	2†	25	20†	25	3.84	+ 0.31	1.62	T.	9	6	13	11	nw.	J. H. Eadie.
Belvidere	Warren	289	19	38.6	− 2.6	65	2	17	21	35	3.92	+ 0.43	1.46	3.0	11	7	10	13	.....	S. J. Hixson.
Bergen Point	Hudson	37	13																	Dr. W. H. Mitchell.

TABLE 1.—*Climatological data for November, 1910. District No. 1*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
New Jersey—Continued.																			
Boonton	Morris	413	20								3.79	+ 0.12	1.97	1.0	10					Foster Peer.
Bridgeton	Cumberland	30	29	41.8	− 3.1	70	2†	20	21	34	3.24	+ 0.30	1.40	T.	8	6	15	9	nw.	H. A. Jorden.
Burlington	Burlington	12	26								3.07	− 0.67	1.54	T.	7				nw.	D. S. B. McCoy.
Canton	Salem	24	16								3.78	+ 0.97		T.	6	5	15	10		J. H. Maskell.
Cape May City	Cape May	17	26	43.6	− 3.8	65	2	27	20	21	1.63	− 1.59	0.66	T.	9	10	16	4	nw.	U. S. Weather Bureau.
Charlotteburg	Passaic	719	18	37.6	− 2.7	61	2	20	21	35	3.95	+ 0.22		4.9	9	2	16	12	nw.	G. S. Briggs.
Chatham	Morris	234	8								4.22		2.20	1.0	11					M. A. Butler.
Clayton	Gloucester	126	17	40.9	− 2.5	69	2†	18	21	37	3.50	+ 0.36		T.	9	3	15	12	w.	W. T. Farley.
College Farm	Middlesex	100	15	39.8	− 3.7	68	2	19	21	30	3.86	+ 0.39	1.90	1.0	9	6	10	14	nw.	G. B. Thrasher.
Culver's Lake	Sussex	848	9								4.60		1.76	14.0	10	6	15	9	w.	B. E. Riker.
Dover	Morris	575	26	36.2	− 4.1	59a	2	15	21	30a	4.80	+ 1.17		4.0	12	3	16	11		W. C. Harris.
Elizabeth	Union	33	31	41.0	− 2.6	64	10	26	29†	23	4.39	+ 1.05		T.	6	3	13	14	nw.	W. M. Oliver.
Flemington	Hunterdon	187	22	40.2	− 2.6	64	2	19	21	34	3.51	+ 0.16	1.74	1.5	11	4	14	12	w.	H. E. Deats.
Haddonfield	Camden	75	16	40.8	− 1.8	68	10	18	21	34	3.64	+ 0.32	1.44	T.	8	4	14	12	nw.	C. F. Richardson.
Hammonton	Atlantic	80	12								2.43	− 1.19		T	8					Orville Bassett.
Hightstown	Mercer	85	18	40.4	− 3.2	70	2	18	21	35	4.24	+ 0.58	2.13	1.5	7	7	12	11	nw.	Ernst Wenger.
Imlaystown	Monmouth	106	24																	Dr. F. C. Price.
Indian Mills	Burlington	76	21	40.4	− 3.0	71	10	12	20	40	3.10	− 0.50	1.15	1.0	8	5	14	11	nw.	James Armstrong.
Jersey City	Hudson	15	12	42.0	− 1.6	67	2	28	21	24	5.67	+ 2.27	3.33	T.	9	8	14	8	nw.	S. K. Pearson, jr.
Lakewood	Ocean	54	8	40.4		69	10	20	21	30	3.92		2.01	1.0	9	6	14	10	nw.	H. R. Major.
Lambertville	Hunterdon	95	24	39.1c	− 3.9	65a	2	17a	21	34a	4.04	+ 0.43	1.65	2.0	10	5	11	14	nw.	W. R. Bowne.
Layton	Sussex	550	11	36.3	− 2.1	60	1†	13	21	39	4.68	+ 1.60	2.45	11.5	8	5	14	11	w.	W. C. Hursh.
Little Falls	Passaic	175	7																	A. Sweetman.
Long Branch	Monmouth	30	3	42.0		65	2	25	21	26	5.73		1.82	0.0	7	5	11	14	nw.	B. B. Bobbit.
Mahwah	Bergen	312	8								3.85				6					C. L. Barker.
Moorestown	Burlington	71	48	41.0	− 2.0	68	2†	20	21	33	2.73	− 0.69	1.29	1.0	9	6	11	14	nw.	J. C. Beans.
Newark	Essex	140	67	40.8	− 2.1	65	2†	22	21	28	5.60	+ 2.10	2.58	0.4	9	2	14	14	nw.	Prof. Wm. Wiener.
New Brunswick	Middlesex	61	57	41.8d	− 1.8	68a	2	19†	20	33†	3.96	+ 0.37	1.75	1.5	10	5	11	14	w.	W. T. Woerner.
Newton	Sussex	678	31																	B. H. Kienbaum.
Northfield	Atlantic		3								2.22		0.74	T.	8					W. L. Flick.
Paterson	Passaic	110	39	40.2	− 3.1	65	2	21	21	23	3.68	+ 0.42	1.54	0.7	9	2	14	14	nw.	H. A. Probert.
Phillipsburg	Warren	196	13	38.6	− 3.0	62	1†	19	21	32	3.85	+ 0.57	2.24	3.1	12	4	12	14	w.	D. W. Smith.
Plainfield	Union	100	24	40.4	− 1.6	68	2	20	21	31	3.83	+ 0.24	1.85	0.4	10	7	11	12	w.	John Neagle.
Pleasantville	Atlantic	26	12								2.60	− 0.76	1.01	0.2	8	6	15	9		L. Van Gilder.
Pompton Plains	Morris	195	8								4.66		2.28	1.0	10					M. S. Taylor.
Rancocas	Burlington	68	47								3.01	− 0.46	1.70	0.5	9	5	7	18	nw.	Spencer Haines.
Rivervale	Bergen	70	19																	G. S. M. Holdrum.
Somerville	Somerset	76	27	40.0	− 2.2	66	2	18	21	34	3.98	+ 0.59	2.00	1.0	9	3	11	16	nw.	P. Hardcastle.
South Orange	Essex	200	40	40.0	− 1.6	64	2	23	21	24	4.41	+ 1.04	2.00	0.2	9	5	11	14	w.	Dr. W. J. Chandler.
Sussex	Sussex	442	20																	Prof. W. H. Seeley.
Trenton	Mercer	60	38	42.3	− 3.1	68a	2†	24	21	30a	2.95	− 0.86	1.70	T.	9	4	15	11	nw.	Paul H. Wendel.
Tuckerton	Ocean	23	17	40.9	− 3.1	67	2	18	21	31	4.14	+ 0.68	1.52	T.	8	5	17	8		F. R. Austin.
Vineland	Cumberland	118	41																	Alfred Chalmers.
Woodbine	Cape May	43	19	41.0	− 3.0	68	2†	16	21	37	2.19	− 0.96	0.70	0.0	7	7	14	9		Prof. H. A. Dodge.
West Virginia.																				
Bayard	Grant	2,500	8	32.6		63	1	5	20†	40	2.72		0.75	14.5	13	6	6	18	w.	Solomon Clark.
Burlington	Mineral	875	15	39.2	− 3.0	70	10	11	20	39	1.27	− 0.74	0.85	T.	3	2	23	5	nw.	I. W. Vandiver.
Franklin	Pendleton		3	37.2		64	9	15	20	38						12	4	14		A. A. Martin.
Lost City	Hardy		4	37.4		66	1†	16	19	34	1.08		0.63	1.0	4	12	8	10	w.	B. D. Hinegardner.
Martinsburg	Berkeley	435	19	39.0	− 3.6	66	10	19	20†	33	1.05	− 1.26	0.74	T.	4	11	15	4	nw.	G. W. Van Metre, C. E.
Moorefield	Hardy	900	14	36.1	− 6.6	71	9	13	20	48	0.82	− 1.02	0.75	T.	2	3	20	7	nw.	John C. Fisher.
Romney	Hampshire	824	14	38.2	− 4.4	68	9	15	21	37	1.85	− 0.20	0.60	T.	6	5	17	8	w.	John C. Linthicum.
Upper Tract	Pendleton	1,230	12	38.6	− 5.6	73	9	12	20	40a	0.85	− 0.99	0.35	T.	3	1a	17a	11a	w.	J. M. Mallow.
Maryland.																				
Annapolis	Anne Arundel	45	32	41.2	− 5.5	62	9	27	17†	28	4.72	+ 1.54	2.40	4.0	6	14	12	4	w.	W. M. Abbott.
Bachmans Valley	Carroll	860	17	39.5	− 2.4	68	10	18	20	30	0.86	− 2.50	0.40	5.0	5	23	3	4	nw.	Elmer E. Yingling.
Baltimore	Baltimore	115	40	42.6	− 3.2	64	10	28	21	24	1.93	− 0.99	1.05	1.0	8	7	14	9	nw.	U. S. Weather Bureau.
Cambridge	Dorchester	25	12	43.2	− 4.5	69	10	24	21	34	4.06	+ 1.42	1.72	T.	8	8	14	8	nw.	T. E. Keenan.
Cheltenham	Prince George	230	10	40.8		69	10	19	21	30	2.62		0.81	6.0	9	8	14	8	nw.	J. E. Burbank.
Chestertown	Kent	80	25	42.0	− 3.4	65	10	24	21	29	3.08	+ 0.21	1.38	T.	5	14	11	5	w.	M. W. Thomas.
Chemsville	Washington	530	13	38.8	− 4.1	64	10	14	20	32	1.12	− 0.84	0.64	5.0	9	2	4	24	nw.	D. Paul Oswald.
Clear Spring	....do	650	13	40.8	− 1.3	61	1†	22	20†	27	1.24	− 0.96	0.58	1.0	6	9	16	5	w.	W. W. Frantz.
Coleman	Kent	80	12	42.2		64	2†	25	21	28	2.74	+ 0.08	1.20	12.0	4	12	11	7	nw.	J. S. Harris.
College Park	Prince George	170	20	40.6	− 4.5	65	10	16	21	36	2.34	− 0.77	1.25	3.0	7	15	12	3	nw.	Prof. H. J. Patterson.
Cumberland	Allegany	700	36								0.89		0.30						e.	J. W. Frantz.
Darlington	Harford	300	18	39.6	− 4.2	67	10	18	21	29	2.27	− 0.72	1.28	1.5	5	8	12	10	nw.	Prof. A. F. Galbreath.
Denton	Caroline	42	15	41.0	− 5.5	67	2†	17	21	35	2.81	− 0.17	1.26	1.5	7	15	5	10	nw.	H. B. Mason.
Easton	Talbot	35	19	42.2	− 3.7	76	10	26	20†	30	3.46	+ 0.83	1.48	T.	7	8	15	7	nw.	Henry Shreve.
Emmitsburg	Frederick	720	37	36.0	− 6.7	66	10	22	21	24	0.93	− 2.47	0.34	T.	8	10	11	9	nw.	Jno. H. Eckenrode.
Fallston	Harford	450	40	40.2	− 3.0	64	10	23	20†	28	2.09	− 1.38	1.30	3.0	6	1	21	8	w.	J. H. Curtiss.
Frederick	Frederick	275	33	40.3	− 3.8	65	10	18	20†	33	1.04	− 1.58	0.33	2.6	5	12	12	6	nw.	Henry Trail.
Frostburg	Allegany	1,929	9	35.6		67	9	18	12	30	1.36		0.71	0.5	12	13	6	11		L. B. Abbott.
Great Falls	Montgomery	200	19	40.0	− 4.0	66	10	18	21	35	0.67	− 1.63	0.20	0.5	8	9	13	8	nw.	J. W. Bissett.
Green Spring Furnace	Washington	450	18	39.5	− 3.0	64	10	22	20†	34	1.32	− 0.93	0.40	1.0	7	9	11	10	w.	E. G. Kinsell.
Keedysville	....do	400	6	40.2		66	10	14	20	37	1.09		0.42	T.	9	8	10	12	nw.	J. A. Miller.
Lake Montebello	Baltimore		1	41.4		64	10	23	21	27	1.82		0.82	1.0	7	12	5	13	nw.	Martin L. Dobler.
La Plata	Charles	190	1	41.8e		68	10	18	21	31e	2.06i		0.72	5.0	6	15e	0e	12e	w.e	Prof. R. H. Lee Reich.
Laurel	Prince George	150	16	40.4	− 4.6	64	10	15	21	34	1.34	− 1.24	0.65	0.0	4	8	18	4		Dr. T. M. Baldwin.
Monrovia	Frederick	630	23	39.4	− 4.1	64	10	19	20	26	1.18	− 2.29	0.29	0.5	8	7	11	12	nw.	J. H. Lawson.
Pocomoke City	Worcester	37	17	43.2	− 6.8	68	2†	25	21	28			0.73	0.0	8	17	8	5	nw.	Hon. R. M. Stevenson.
Porto Bello	St. Mary	38	5	43.4b		70b	10	26b	25	38b										Alpheus Hyatt.
Princess Anne	Somerset	17	17	41.4	− 5.0	68	10	20	21	36	1.74	− 0.52	0.49	T.	7	5	19	6	nw.	Jas. R. Stewart.
Rockville	Montgomery	421	3																	Dr. Geo. E. Lewis.
Salisbury	Wicomico	23	5	41.8		68	10	18	21	37	2.47		0.90	T.	10	11	16	3	nw.	W. E. Downing.
Sanatorium	Frederick	1,200	2	37.3		63	1	22	7	23	1.32		0.35	11.2	8	11	15	4	sw.	Dr. W. M. Garrison.
Solomons	Calvert	20	19	41.8	− 4.8	68	2†	28	20	22	1.52	− 0.67	0.70	2.0	7	5	7	18	nw.	Dr. W. H. Marsh.
Sudlersville	Queen Anne	65	11	41.5	− 4.4	66	2	20	21	34	4.26	+ 1.71	2.05	1.5	9	13	11	6	w.	Jas. E. Higman.
Takoma Park	Montgomery	320	12	39.1	− 5.6	64	10	21	21	33	1.75	− 0.34	0.38	2.5	9	10	14	6		L. M. Moores.
Tarreytown	Carroll	450	11	39.2	− 4.3	65	1	15	20†	33	0.92	− 2.00	0.80	0.5	4	14	6	10	nw.	R. A. Nusbaum.
Towson	Baltimore	465	2	40.4		63	10	20	21	29	1.88		1.03	6.0	5	10	8	12	nw.	C. W. E. Treadwell.
Van Bibber	Harford	100	13	39.0	− 5.0	62	2	18	21	29	2.55	− 0.55	1.07	T.	6	13	9	8	nw.	W. Benj. Ford.
Westernport	Allegany	1,000	16	37.6	− 4.4	71	9	14	20	46	1.39	− 0.42	0.65	0.5	7					Prof. O. H. Bruce.
Woodstock	Baltimore	392	36	41.2	− 1.6	64	11	18	21	29	1.34	− 1.64	0.31	3.0	10	11	12	7	nw.	Rev. A. J. Donlon, S. J.
Delaware.																				
Delaware City	New Castle	20	8	41.8		65	2†	24	21	26	2.23		0.86	T.	3	20	6	4	nw.	H. Morton Price.
Dover	Kent	40	22	42.6	−0.7	74	3	21	21	40	2.86	−0.54	1.20	T.	4	10	11	9	w.	Thos. F. Dunn.
Milford	....do	20	26	42.6	−2.9	67	2†	21	21	33	2.69	−0.45	0.94	T.	9	7	21	2	nw.	C. J. Holzmueller.
Millsboro	Sussex	20	18	41.6	−4.9	71	10	18	21	38	2.17	−0.50	0.75	T.	6	18	5	7	nw.	Rev. L. W. Wells.
Seaford	....do	40	17	41.8	−4.4	66	2†	19	21	35	2.26	−0.38	0.78	1.0	8	18	8	4	nw.	E. B. Brown.

TABLE 1.—*Climatological data for November, 1910. District No. 1*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
District of Columbia.																			
Washington	District of Columbia	112	40	41.4	−3.6	66	10	23	21	29	2.28	−0.43	1.17	4.0	10	9	10	11	nw.	U. S. Weather Bureau.
Virginia.																			
Culpeper	Culpeper	450	2	38.7	.....	62	10	18	21	33	1.03	.....	0.51	0.0	4	5	21	4	nw.	Col. H. C. Burrows.
Dale Enterprise	Rockingham	1,350	30	37.6	−6.2	65	9	13	20	41	0.80	−1.45	0.27	T.	6	5	16	9	w.	Rev. L. J. Heatwole.
Doswell	Hanover	134	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rich., Fdksbg. & Pot. R. R.
Eastville	Northampton	15	....	45.4	.....	71	10	26	18†	32	1.35	.....	0.43	T.	6	16	5	9	nw.	Thos. B. Robertson.
Fredericksburg	Spottsylvania	105	21	41.2	−5.3	69	10	18	21	35	1.23	−1.19	0.54	T.	9	9	14	7	nw.	S. G. Howison.
Lincoln	Loudoun	500	9	40.6	−4.0	76	11	13	21	48	1.16	.....	0.55	T.	4	9	11	10	n.	Dr. Geo. Roberts.
Mount Weather	....do	1,726	6	36.0	−4.4	62	10	22	20	23	0.93	−1.93	0.69	2.1	7	4	13	13	nw.	U. S. Weather Bureau.
Quantico	Prince William	16	13	39.4	−5.2	68	10	24	18	36	2.74	.....	0.90	T.	5	13	3	14	ne.	Rich., Fdksbg. & Pot. R. R.
Staunton	Augusta	1,380	18	39.2	−6.3	66	1†	19	20	36	0.87	−1.37	0.30	T.	6	8	14	8	nw.	Ernest Nothnagel.
Stevens City	Frederick	710	18	38.8‖	−5.0	69	9	13	18	38	0.99	−1.06	0.51	0.0	5	.....	.....	.....	w.	B. T. Argenbright.
Warsaw	Richmond	160	18	42.3[a]	−4.1	70	9	20	21†	35	2.77	+0.19	0.95	T.	7	7	18	5	n.	C. H. Constable.
Woodstock	Shenandoah	927	14	40.0	−4.6	69	1†	15	20	41	0.88	−1.14	0.58	T.	4	12	11	7	w.	Miss A. G. Miley.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 1, North Atlantic States.*

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Maine.																															
Bar Harbor	Coast			T.	T.	.20	.30	.10	.17		.03	T.					T.			T.			.10	T.	.45	.10	.10	.10	T.	.20	.15	2.00
Cornish	Saco			.29	.64	.12	T.	T.			.11		.10	T.	T.								.30		.04					.60	.42	2.62
Danforth	Penobscot				.10	.50	.80					.30			.05		T.						.05		.08		.30	.40			.70	3.28
Eastport	Coast			T.	T.	.34	.16	.03			T.	.15			.22	.08	T.						.01		.02	.13	.34	.18		.04	.44	2.14
Ellsworth	do				T.	.37	.16	.03	.17			.09						.01			T.		.03	.19	T.	.19	.39	.12	T.	.01	.39	2.15
Fairfield	Kennebec					.54					.06														.44					*	.49	1.53
Farmington	do				.03	.68	.01	T.			T.	.10	.13	.01											.20		.05	T.		.15	.95	2.31
Gardiner	do				.16	.42	.18	.16			T.	.04	.02										.10	.08	.23	.02	.07	.01		.21	1.00	2.70
Greenville	do				.12	.40	.04		T.	.02	.07	.07	T.	.25	.20	T.	T.			T.			T.	T.	.30		.10	.10	T.	.25	1.20	3.21
Houlton	St. John						1.02					.03											.05		.05		.02				.25	1.42
Lewiston	Androscogin				.09	.32	.03	.14			.05	.15	.18										.11		.15					.60	.36	2.18
Madison	Kennebec				*	1.00					.10														.33					*	1.44	2.87
Millinocket	Penobscot				.03	.41	.47	.05				.14		T.										.05			.33	.04	.05	T.	*	1.29	2.86
North Bridgton	Saco			.41		.49	.05	.03			.08		.54		T.								.09		.14					.68		2.51
Oquossoc	Androscoggin									.50	.40	.60																		1.00		2.50
Orono	Penobscot				.03	.21	.16	.03				.08			T.								.05		.04	.14	.10					.58	1.42
Patten	do				.04	.62	.16	.03				.18											.03		.30	.02	.14	.04		T.	.80	2.36
Portland	Coast				.43	.25		T.			.07	.01	.05	T.									.28		.14			T.		.38	.24	1.85
Presque Isle	St. John			.04	.05	.28	1.40	.04	T.			.21	.06										T.	T.	.10	.05	.10	.11		T.	.34	2.78
Rumford Falls	Androscoggin		T.	.15	.36	.24	T.	.04			.05	.06	.02												.12				T.	.72	.52	2.28
The Forks	Kennebec					.30		.20				.25													*	.25				*	1.50	2.50
Winslow	do					*	.63	.10															.10		T.	*	*	.30			1.30	2.43
New Hampshire.																															
Alstead Center	Connecticut			1.19	.51	.68					.12		T.	.01									.07		.08	.05				.85	.26	3.80
Benton	do			1.02	.04		T.	.05			T.	T.	.20	.05	.25	T.	T.						T.	T.	T.	T.	.05			.63	.02	2.31
Bethlehem	do			.54		.20	.05	.15	T.			T.	.20	.10	.16	T.	.05	T.					T.		T.		T.			.25	.55	2.19
Brookline	Merrimack			.85	.86	.02					.20			T.						.02			.10			.05				.50		2.60
Concord	do		.23	.65	.35	T.	T.	T.			.09		T.	T.						T.			.15		T.	.01			T.	.93	.19	2.60
Durham	do			.35	.07	.45					.12												.38			.04				.60		2.01
Franklin	do			1.10	.05	.27					.08	.02	T.	T.						T.			.15		.02	.03				.69	.23	2.64
Grafton	do			1.28	.08	.54					.05			.02	.01								.10		.07	.02				.47	.18	2.82
Hanover	Connecticut		.07	.98	.12	.30		T.	T.		T.			T.	T.	T.				T.			.01		.06	T.				.70	.21	2.49
Keene	do			1.08	.08	.37					.10		T.	.05		T.				T.			.12		.04	.14				.78	.28	3.04
Nashua	Merrimack		.04	.56	.89	.02					.19			.02									.06			.02				1.04	.21	3.05
Newton	do			.30	1.36			T.			.18		T.	T.			T.			T.			.13			.06				.73		2.76
Plymouth	do			.94	T.	.49		T.			.02	.09	T.	T.	T.		T.			T.			.09		T.		T.			.38	.27	2.28
Vermont.																															
Bloomfield	Connecticut			.53		.21	.02	.05				.02	.11		.04			.04	.07						.05						.30	1.44
Cavendish	do			1.10	.19	.26			T.		.06		T.	T.	.05							19			.09	.10				.80	.19	3.03
Chelsea	do		.04	.66		.18					.04			T.		.04							.05		.03					.50	.40	1.94
Jacksonville	do			1.15	1.06	.15						.05	.05										.07			.07	.07			.70	.07	3.44
Manchester	Hudson		*	1.07	.19	.34	.05	T.			.13	.07		.31											T.					.47	T.	2.63
St. Johnsbury	Connecticut			.76		.10	T.	.05			T.		.02	T.	.06		T.	T.	T.	T.			.01		.07					.28	1.02	2.37
Vernon	do		.95	.38	.50	T.				.04												.02	.04			.14				.56		2.69
Woodstock	do				1.05	.21			T.		T.												.07							1.11		2.44
Massachusetts.																															
Amherst	Connecticut		.44	.73	1.01					.06	.16												.13			.17				.99		3.69
Ashland	Merrimac			*	*	2.35					.30												T.	.01		.20				*	1.18	4.04
Bakers Bridge	do			.45	.60	.97					.04															.25				.60	.33	3.33
Bedford	do			.46	1.24	.11					.34		T.	T.						T.			.02			.21				.88	.28	3.54
Blue Hill	Coast		T.	.29	3.27	.08					.33	T.	.01	T.						T.			.01		T.	.13	T.			1.02	.25	5.39
Boston	do		T.	.48	1.73	.01					.33			T.						T.			.01			.07	T.		T.	.96	.16	3.75
Chestnut Hill	do		.48	.71	2.63					.37	.03																	.35	1.09		5.77
Clinton	Merrimack			.93		1.76					.26												.03			.24				*	1.30	4.52
Concord	do			.46	1.12	.38					.26	.04	T.	T.						T.			.01	T.		.18				.75	.32	3.52
Fall River	Coast		.01	.07	1.53	.37			T.	.02	.06												.02				.01			1.00	.10	3.54
Fitchburg	Merrimack			.61	.69	.16					.18		T.	T.	T.	T.							.11			.08				.55	.31	2.69
Framingham	do			.62	*	1.67					.31															.19				*	1.23	4.02
Haverhill	do			.46	.77	.83					.17	.02		T.						T.			.11	T.		.06				.60	.20	3.22
Hingham	Coast			.06	2.91	.44					.36		T.	T.									.01		T.	.19					1.36	5.33
Hyannis	do				1.56	.60			.05	.06	.04	.01		T.		.06							.09	.07	.12	.12	.08	.02		*	.98	3.86
Jefferson	Merrimack			.94	1.26						.24		.06										.14			.17				1.40		4.21
Lake Cochituate	do			.38		1.96					.31															.18				1.33		4.16
Lawrence	do			.61	*	1.14					.23		T.	T.						T.			.05			.05				*	.65	2.73
Leominster	do		T.	.71	1.33	.09					.19												.08		T.	.10				1.04	.23	3.77
Lowell	do			.47	*	1.51					.29	.02											.10			.16				*	.92	3.47
Middleboro	Coast			.01	2.07	.37			T.	.11	.01			T.									.05	.04	.02	.39				1.00	.26	4.33
Monson	Connecticut		.05	.90	.95	.05				.20	.30	.05	T.	T.	T.			T.		T.			.10			.22				1.00	.15	3.97
Nantucket	Coast			T.	1.14	.44		T.	.24	.03		.26	T.	T.	T.	.03							.08	.05	T.	.29	.13	.02	.01	.73	.01	3.46
New Bedford	do																														
Norfolk	do			.62	1.21	1.28					.26	T.		T.									T.			.17				1.70	.67	5.91
Northampton	Connecticut		*	1.49	.37	.53			*	.32												13				.15				.45		3.44
Plymouth	Coast			.04	*	2.49								T.									.20			.28	.33			.17	1.34	5.00
Princeton	Merrimack			*	*	1.98					.20												.15				.20				*	1.70	4.23
Provincetown	Coast				.98	.74					.27	.06														.14	T.		T.	.10	T.	.78	.38	3.45
Rockport	do				.81	.80					.35												.50	.10		.10				1.00	.45	4.11
Rutland	Connecticut		*	*	2.13	T.			T.	*	.24	T.	T.	T.									.11			.15				*	1.23	3.86
Somerset	Coast		.04	*	*	2.51			T.	.21	.06	.03				T.							.05		.02	.24				*	1.11	4.27
South Egremont	Housatonic		.58	.75	.60	T.		.12	.43	.08	.17	.13	.27	.12					.08							.40			.42	.18		4.37
Spot Pond	Coast		.35	.43	1.45	.01				.30	.05												.03			.10			.07	.90	.02	3.71
Sterling	Merrimack				*	2.46					.36															.20				*	*	1.14	4.16
Taunton	Coast			T.	2.34	.32			T.		.18	T.	.04	T.									T.	T.	T.	.37	T.			1.33	.20	4.78
Turners Falls	Connecticut			1.23	.29	.46			T.		.10												T.			.16			T.	1.13	.18	3.55
Westboro	Merrimack			*	*	2.65	T.				.25		T.										T.			.16					1.50	4.56
Williamstown	Hudson		.63	.73	.12	.20	.03	.05	.02	.19	.08	T.	.11	.09	.06	.05	.06			.05			.02		T.	.10				.95	.07	3.61
Winchendon	Connecticut		.10	.58	.79						.14			T.		.04							.15			.07				.90	.21	2.98
Worcester	Coast		T.	.41	1.27	.20				.02	.21	T.	T.	T.									.06			.07				.52	.14	2.90
Rhode Island.																															
Block Island	Coast		.02	.85	3.10	.01			.12		.04	.04	T.		.03	.03							.02			.26				1.03	.03	5.58
Bristol	do		*	.07	*	2.52			.02		.00												T.	T.		.25			T.	.99	.19	4.23
Greene	do			.77	2.35						.11		.01													.29				1.04	.24	4.81
Hope Valley	do		T.	.68	2.31	.06			.05			.02	T.	T.		T.										.20			T.	.80	.16	4.28
Kingston	do			.92	2.60	.05			.06		.03					T.										.30				1.20	.31	5.47
Narragansett Pier	do		T.	.53	2.19	.10			.10	T.	T.	.01	T.			T.										.33				1.03	.16	4.45
Pawtucket	do			.36	*	2.16			T.		.11												T.			.14				1.28		4.05
Providence	do		.06	.35	1.46	.03			.01	.04	.03					T.							T.			.21			T.	1.06	.12	3.37
Wallum Lake	do	*	.56	.64	.70					.33	.02		T.													.28				.20	.15	2.88
Connecticut.																															
Bridgeport	Coast		T.	.66	1.65	.23			.17	T.			T.	T.									.05			.35			T.	.75	.07	3.93
Canton	Connecticut		.10	*	5.04					T.	.26	T.											.10			.22			*	.30		6.02
Colchester	Coast			.98	1.75	.25		T.	.09	T.		.10	T.	T.		T.										.51				*	1.04	4.72
Cream Hill	Housatonic		.17	1.26	1.49	.41		.08	.06		.35	.09	.02	.25	.01					.02			.03			.51				.50	.12	5.39
Danielson	Coast			.66	1.70						.08															.55					.20	3.19
Falls Village	Housatonic		.50	2.00	.54	.24	T.	.01	.12	.14		.15	.04	.13	.02	T.	T.			.05			.02			.44	.02		.06	.52	.05	5.05

TABLE 2.—*Daily precipitation for November, 1910. District No. 1*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Connecticut—Cont'd.																															
Hartford	Connecticut		.31	1.01	1.70	T.			.04	T.	.01	T.	T.	T.		.01				T.		T.	.10		T.	.27			.12	.74	.05	4.36
Hawleyville	Housatonic		.11	1.50	1.60	.57			.20														.52							.46	.08	5.04
Lake Kenomoc	Coast			1.00	1.19	1.00																								1.00	.20	4.39
New Haven	do		T.	1.24	1.71				.14	T.	T.	T.	T.	T.	.01	.01	T.					T.	.04			.36			.13	.89	.03	4.56
New London	do		.02	1.08	1.95				.03		T.		T.		T.								T.			.51				.89	.12	4.60
North Grosvenor Dale	do			.45	.95	.20			T.		.24	.02				T.										.15				.38	.24	2.61
Norwalk	do			*	2.72				.17																	.34			*	.70		3.93
Southington	do		.15	.90	1.80	.45			.10		T.	T.		T.		T.							.05			.30				.90	.10	4.75
South Manchester	Connecticut		*	*	2.37							T.	T.													.37				1.05		3.79
Storrs	Coast			1.06	1.43																					.19				.83		3.51
Voluntown	do			.97	1.73	.15			T.		.09															.25				.76	.08	4.03
Wallingford	do		.20	1.24	1.30				.10				T.	.01	.04								.07		.28	.16			.55	.29		4.24
Waterbury	Housatonic		.45	1.38	1.82	.47		T.	.13				.03	.01	.02	T.	T.					.04				.31				.74		5.40
West Simsbury	Connecticut		*	*	*	3.27			.09	*	.12	.05	*	.02									.08		T.	.21				.76		4.60
New York.																															
Addison	Susquehanna		.03		.10		T.		.33		.09	.04	.15	.04	.03	.15	.05			.03						.28			.29	.50	T.	2.11
Albany	Hudson		.08	.67	.24	.17	.01	T.	T.	.60	.11	T.	T.	T.	T.	T.			T.	T.		T.	.05		.01	.18	.15		.06	.39	.02	2.74
Alfred	Susquehanna		.19		.10		.10	.05	.30		.30	.10	.55	.15	.20	.10	.05			.10			.05			.30	.05		.46	.30	.15	3.60
Amsterdam	Mohawk				1.20	T.	T.	.69					.02				T.			.05			.20		T.	.35				.40	.10	3.01
Athens	Hudson		.02	1.16	.58	.10	T.	T.	T.	.16	T.	.04	T.	T.	T.	T.	T.			T.			T.			.32				.42	T.	2.80
Balston Lake	do		T.		.79	.40	T.	T.	.01	T.	.33	.02	.01	T.	T.	T.	T.			T.			.11		.04	.11	.10				.62	2.54
Bedford	Coast		.10	1.40	2.60	.12		T.	.16		T.	T.	T.	T.		.04							.04			.20				.42	T.	5.08
Binghamton	Susquehanna		.14	.60	1.63	.06	T.	T.	.14	.08	.01	.02	.11	.13	.08	.01	.07		T.	T.		T.	.01	.07	T.	.25	.01		.38	.20	.02	4.02
Bouckville	do		.21	.05	.43	.04		.10		.18	.25		.15	.35	.10	.05	.20			.10			.11		.05	.09	.10			.51	.15	3.22
Carmel ‖	Hudson			.3	1.89	1.31				.17						.02							.05			.51	.05			.41	.06	4.81
Chatham	do		T.	.98	.28	.18	.01	.01		T.	.30	.03	.01	T.	.07	.02	T.						T.			.23	.03			.40	.11	2.66
Cooperstown	Susquehanna		.14	.57	.40	.05			.03	.37		.04	.09	.16			.03		.04			.04				.28			.30	.09	.10	2.73
Corinth ‖	Hudson			.40	.48	.30							.27																	.55	.40	2.40
Cortland	Susquehanna		.29	.02	.48	.04	T.	.06	.07	.05	.29	.06	.23	.20		.15	.17			.03			.12			.21	.07			.63	.10	3.26
Cutchogue	Coast			1.10	2.55				.27		T.	T.	T.													.91			T.	1.34	.16	6.33
De Ruyter	Susquehanna		.20	.02	.90	.30	T.	T.	.05	.23	.35		.29	.25	.15	.43	.05			.02			.08			T.				.62		3.94
Easton	Hudson			*	*	.64				.06			T.		T.													*	*	*	1.00	1.70
Elmira	Susquehanna		.15	.20					.20		.07		.10		.12	.02													.15	1.04		2.09
Fort Hunter ‖	Mohawk																															
Fort Plain	do		.17	.23	.80	.52	.01	.07	T.	.16	1.06	T.	T.	.14	.01	T.	.01	T.	.01	T.			.11		.02	.13	.04			.23	.08	3.80
Glens Falls	Hudson		.05	.70	.06	.25					.11		.06	T.						T.			.08	T.	T.					.70	.08	2.09
Gloversville	Mohawk		.05	.30	.50	.32	T.	.12	.03	.10	.36		.05	.03	T.	T.	T.						.10		.08	.06	.07			.57	.05	2.79
Greenfield Center	Hudson			.40	.10	.27					.27		.13	.03									.08		.10	.12				.50		2.00
Greenwich	do		.03	1.07	.02	.14	.01				.07	.01	T.	.01	.01	T.							.04		.05	.03				.86	.19	2.54
Griffin Corners	Delaware																															
Haskinville	Susquehanna		.20		.15	.07	T.	.10		.23	.10				.08	.12	.07	.04	T.	T.		T.			.10	.21	T.		.17	.45	.30	2.39
Homer	do		.29	.10	.51	.01	T.	.18	.11	.02	.44	.01	.27	.22	.02	.10	.38	.02	T.	T.		T.	.12		T.	T.	.27	T.	.05	.60	.11	3.83
Hoosick Falls ‖	Hudson			1.79	.40	.14	.08	.04	T.	T.	.21	.09	.04	.06	.05	.02	T.	T.	T.	T.			.07		.12					.40	.46	3.97
Indian Lake	do		.20	.15	.05									.05						.03										30	.20	
Jeffersonville	Delaware		T.	.36	.94	.21		.01	.21	T.	T.	.10	T.	.03		.04	.02			T.			.06		T.	.44			T.	.52	T.	2.94
Lake Pleasant	Hudson		.30	.30	.50	.30		T.			.10	.10													.20				.40	.20	2.40
Liberty	Delaware		T.	T.	.90	.50	T.	T.	.48	T.		T.	T.	T.	.12								T.			.32				.40	T.	2.72
Little Falls	Mohawk		.22	.08	.56	.37	T.	.08	T.	.41	.40			.27	.06	T.	T.			.18			.07			.02	.04			.17	.15	3.08
Mohawk Lake	Hudson		1.52	.40		1.52			.27																	.46				.47		4.54
Morehouseville	Mohawk		.30	.05	.15	.50	.05	.05		.10	.15	.20	.15	.10	.05	.15	.05	.03	.10	.68			.10		.15	.10	.05			.30	.25	3.21
Mount Hope	Coast																															
Newark Valley	Susquehanna		.27	.30	.87	.01	T.	T.	.22	T.	.21	T.	.14	.20	T.	.04	.02					T.	T.	T.		.40	.05		.20	.58	.05	3.58
New Berlin ‖	do			.29	.51	.18		.01	.02	T.	.21	.04	.06	.10	.06	.02	.03	.03		.01	.02		.10	T.		.27	.03			.49	.12	2.60
New Lisbon	do		.15	.10	.73	.30		.03	T.	.12	.18		.12	.06	.04		.08			.07			.02			.26				.39	.06	2.71
New York City	Coast		.01	2.82	.79	.01		T.	T.		T.		T.	T.	T.							.01	T.	T.	T.	.47			.34	.17		4.62
North Creek	Hudson		*		*	.90					.22																			.75		
Northville	do		.14		.45	.24				.20	.10											.10		.12					.40	.20		1.95
Norwich ‖	Susquehanna			.30	1.20			.64							.04																	
Oneonta	do		.09	.07	.68	.40	T.	.03	.08	.09	T.	T.	T.	.15	.05											.18				.45	.15	2.42
Oxford	do		.22	.20	1.00	.20	T.	T.	.11	.05	.25	T.	.20	.25	T.	.05	.10	T.	T.	T.			T.		.22	.30	T.			.50	.23	3.87
Port Jervis	Delaware			.71	.83	1.16			.22			.02				.06							.03		.30					.45		3.78
Salisbury	Mohawk		.41	.12	.34	.26	T.	.20		.41	.16	.11		.38									.28		.11		.12			.45		3.35
Salisbury Mills	Hudson		*	*	*	4.46			T.	.15					T.								T.			*	.72		*	*	.50	5.83
Scarsdale	Coast		T.	2.00	.65	T.			.05						T.	.02										.45			T.	.41	T.	3.58
Setauket	do		T.	1.40	1.88	.05			.07		T.			T.		.04							.07			.23	.02		T.	1.02	.08	4.86
Sherburne ‖	Susquehanna				.79	.06		.08				.26	.08										T.		.20	.31				.41	T.	2.19
Southampton	Coast		T.	.76	2.04			T.	.18			T.	.04	T.	.01	.09	T.	T.		T.			.03			.84				.98	.17	5.14
Spier Falls	Hudson			.75	.14	.24					.10		.08										.08			T.				.95	.15	2.49
Trenton Falls ‖	Mohawk				.66	.23	.07	.28	.10	T.	.70	.05	T.	.10	.12	T.				.05			.10	T.	.25	T.	.12			.25	.20	3.28
Tribes Hill ‖	do			.20	*	2.00		.20			.70									.20										.40		3.70
Utica ‖	do			.23		.69	.45	.18		.30	.65			.30	.71					.50										.52	.08	4.61
Wading River	Coast		.02	.72	2.05	.15			.15				T.		T.	.05							.04			.48				1.29	.22	5.17
Wappingers Falls	Hudson			.82	.78	.18			.42			.21		T.	T.	T.	T.									.43			T.	.32		3.16
Warwick	do			2.00	1.75	.35			.12			.03			.10											.55			.20	.40		5.50
Waverly	Susquehanna		.09	.07	.55	.04		T.	.30		.02	.04	.09	.03	T.	.15			T.	T.			.04		.07	.26	.03			.22	.47	.02	2.49
West Berne	Mohawk		T.	.20	.39	T.			T.	.05	.34	.13	T.	T.	T.	T.	T.			T.			T.			.20	.10			.40	.10	1.91
West Point	Hudson		*	1.30	1.10	.90			.15						.06											.50			.35	.10		4.46
Windham	Mohawk		T.	.68	3.02	1.27	T.	T.	.05	.01	.24	T.	T.	.20	T.	.08		.12					T.				.05			.44	.07	6.23
Pennsylvania.																																
Altoona	Susquehanna		.01									.01	.01	T.	T.	.01				T.					T.	.01	T.		.02	.26	T.	0.33
Ansonia‖	do		.03	.08	.03	.04	T.	T.	.22	T.		.17	.11	T.		.16	.03	.06							.02	.32	.32			.82	T.	2.41
Austin	do		.40						.22		.35	T.	.24	.15	.20	T.	.05			T.			.10			.30			.70	.15	.20	3.06
Bellefonte	do		.20					.05						.10		.20								.09	.11				.65			1.40
Bethlehem	Lehigh																															
Brower's Lock	Schuylkill				.56	.61	.07								.19	.05										.07				.21	.38		2.14
Catawissa	Susquehanna				.40	1.00					.65			.10	.20									T.	.10	.22	.03			.10	.55		2.99
Center Hall	do			T.	.25				.15		T.		T.	.15	.10	.20													.05	.38	T.	1.28
Clearfield	do		.22						.13		.19	.03	.13	.13	.07	.06				.60						.31				.33	.23	.87	3.30
Coatesville	Coast		.08	1.24	.93	.02							.14	.07	.11	.02										.09	.01			.38	.08		3.17
Doylestown	Schuylkill			2.07	1.30	.17										.08										.13				.29		4.04
Drifton	Susquehanna		.05	.30	.40	.10	.02		.13		.07	.06	.06	.25	.05	.20										T.				.15	.90	.10	2.84
Emporium	do		.33				T.	T.	T.		.20	T.	.24	T.	.16	.17	T.		T.	T.		T.	T.	.15	.06	.26	.30			.42	.06	.05	2.40
Ephrata	do		T.	.05	1.54	.06			.01		T.	T.	.07	T.		.12									T.		.01			.02	.35		2.23
Everett	Juniata		.26					T.				T.	T.												.20					.75	T.	1.21
Forks of Neshaminy	Delaware		.02	1.55	.82	.04											.17									.05				.12	.42		3.19
George School	do		T.	1.47	.89	.07			.04		T.		T.	T.		.16														.07	.56		3.26
Gettysburg	Potomac		.05		.08				.02		T.	.05				T.									T.	.16				.21	.27		0.84
Girardville	Susquehanna		.08	.96	1.08	.05			.16		.02	.03	.08	.10	.27	T.			T.				.04	.04	.20					.40	.24	.05	3.80
Gordon	do		.04	.13	1.46	.08			.13			.05	.04	.04	.03	.25	.01											22		.04	.49		3.01
Hamburg	Schuylkill		1.00	1.23	.27											.14									.24							2.88
Hanover	Susquehanna		.04	.05	.47	.02			T.		.03					.05										.21	.03			.22	.31		1.43
Harrisburg	do		.02	.01	.03				.11		.02	T.	T.	T.	.13	T.							.02		T.	.01				.36	.12	T.	0.83

TABLE 2.—*Daily precipitation for November, 1910. District No. 1*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Pennsylvania—Cont'd																																
Huntingdon	Juniata		.20						.09		.03	.05	.08	.07		.18										.18			.45	.23		1.56
Hyndman	Potomac		.16						T.		T.	T.	T.	T.	T.	T.	T.						T.	T.	.06	T.		.15	.56	T.	T.	0.93
Kennett Square	Const.		*	*	2.14						T.	T.	.10		.21				T.					T.	.16	T.			.57			3.18
Lancaster	Susquehanna			.38	.83										.24										.11				.42			1.98
Lansdale	Schuylkill			1.36	1.33	.21										.14										.08			.31	.07		3.50
Lawrenceville	Susquehanna		.15	T.	.12		T.	T.	.25		T.		.10	.10	.02	T.	T.		T.								.10		.15			0.99
Lebanon	do		.02	.18	.95	.16			.32		T.	T.	.38	.08		.20	T.								.01	.03	.01		.16	.31		2.81
Le Roy	do		.12	.06	.35			.01	.10	T.	.10	.10	.15	.15	.05	.05	.02		T.	.02					.05	.22	.02		.26	.56	.06	2.45
Lewisburg	do		.09	.03	.26	.04			.12		.05	.01	.01		.01	.22										.26	.02		.19	.48		1.79
Lloyd	do																															
Lock Haven	do		.19	T.	T.		T.		.09		.06	T.	.01	T.	.05	.15	T.							.10	.20	.04	T.		.40	.45	T.	1.74
Marion	Potomac		.13									T.				.17										.16			.24	.41		1.11
Mauch Chunk	Delaware		.03	.58	1.19			.13			.01	.05	.05	.03	.04	.13	.03									.32	.03		.18	.44		2.24
Mifflintown	Juniata		.10		.02				.05		.03	T.	T.			.11									.02	.12			.17	.47		1.09
Milford	Delaware			1.05	1.05	2.49		T.	.03	T.	T.	T.	.09	T.		.09	T.			T.			T.			.04			T.	.65		5.49
Montrose	Susquehanna			.21	.22	T.	.09	T.	.26	T.	T.	T.	.20	.30	.20	.20	T.	T.	T.	T.			T.		T.	.26	T.	T.	.10	.50	.10	2.64
Mountain House	Juniata		.17								T.	.14																	.18	.26		0.75
Muney Valley	Susquehanna		.18	T.	.80				.10			T.	.18	T.	.10	.20	T.									.31	T.		T.	.29	T.	2.16
New Germantown	do		.11		T.				.16		.10		T.																.70	.45		1.52
Ottsville	Delaware		.05	1.37	1.34	.10			.03							.18								.06					.02	.46		3.61
Philadelphia (1)	do		.17	1.58	1.15				T.		.01	T.	T.	T.	.15	.04								T.	.02	.03			.42	.08	T.	3.65
Pocono Lake	do		T.	.50	.90	.56			.20			T.	.20	.20	.10							.10				.31			.09	.49	T.	3.56
Point Pleasant	do		.03	1.94	1.06	.06										.15									.05				.08	.49		3.86
Pottsville	Schuylkill		.01	.59	.98	.39			.11		.02		.01	.01	.02	.18	.05									.05			.31	.17		2.90
Reading	do		.04	.98	.76	.02			.07				.02		.23	.02									.02	.03			.31	.11		2.61
Renova‖	Susquehanna			.30			T.		.06			.06	.06			.18									T.	.42				.72		1.80
Scranton	do		.05	1.51	2.51	.04			.11				.12	.11	.20	.14										.29			.29	.25	.01	5.63
Seisholtzville	Schuylkill			1.25	1.14	.19			.04				.03		.06	.08										.04			.10	.37		3.30
Selinsgrove	Susquehanna		.20		.86				.10		.10	.01	.01	T.	.09	.20									T.	.15	.02		.13	.52		2.39
Shawmont	Schuylkill		.03	1.30	.65										.03	.10										.11			.10	.35		2.67
Shippensburg	Susquehanna																															
Smiths Corners	Schuylkill			1.61	.86				.11							.18													.27	.53		3.56
Spring Mount	do				2.42										.02	.18									.03				.03	.47		3.15
State College	Susquehanna		.19		T.	T.	T.	T.	.05		.03	.02	.01	.01	.10	.11	T.	T.	T.	T.			T.	.08		.11	T.		.73	.22	T.	1.68
Towanda	do		.13	.24	.56	.03		T.	.14	T.	.04	T.	.05	T.	.14	.08	T.		T.	T.			T.		.01	.33	T.		.27	.43	T.	2.45
Wellsboro	do		.17		.08						.25		.11		.06		.20								.05	.28	.06		.57	.30		2.13
West Chester	Const.		.10	1.65	1.56	.02							.03		.05	.08									.01	.15			.31	.37		4.33
Wilkes Barre‖	Susquehanna		.04	1.30	.50				.04			T.	.04		.04	.10									.02	.20				.48	T.	2.76
Williamsport	do		.10	T.				T.	.04		.06	T.	.03	.03	.20									.04	.19	T.			.66			1.35
New Jersey.																																
Asbury Park	Coast			2.00	2.21	.32		T.	.05		T.					10										.17			.22	.30		5.37
Atlantic City	do			1.02	.45	T.			.06				T.		.05	T.										.09			.56	.09		2.32
Bayonne	do		T.	1.62	.85	.28		T.	.03		T.		T.	T.	T.	.08						.05				.39	T.		.01	.53	T.	3.84
Belvidere	Delaware			1.19	1.46	.11			.08				T.	.11		.19										.19				.59		3.92
Bergen Point	Coast																															
Boonton	Passaic			.33	1.97	.63			.02				T.	T.		.06										.18	.06			.46	.08	3.79
Bridgeton	Coast			1.10	1.40							T.			.10										.22	.02			.40		3.24
Burlington	Delaware		.40	1.54	.48				T.				T.		.15										.07			.39	.04	T.	3.07
Canton	Coast			*	2.97				T.		.04	T.	T.												T.	.26			*	.51		3.78
Cape May City	do		.02	.66	.12				.02						.10											.15	.02		.51	.03		1.63
Charlotteburg	Passaic			*	2.80				.18							.11										.56			*	.30		3.95
Chatham	do			.25	2.20	.60			T.	.03					.09	.05										.25	.10			.55	.10	4.22
Clayton	Coast			*	2.72						T.		T.			.16										.17			T.	.45		3.50
College Farm	do		T.	1.90	.90	.09			.02		.02		T.	T.	T.	.11										.15			.03	.64		3.86
Culvers Lake	Delaware			1.46	1.76	.17		T.	.07			T.	T.	T.		.04				T.		T.				.50			T.	.60		4.00
Dover	Passaic			*	*	3.65			.05		.04			.02	.10							.01				.28			*	.65		4.80
Elizabeth	Coast			*	*	3.04		T.					T.													.77			*	.58		4.39
Flemington	do		T.	1.74	.74	.05			.02		T.		.03	T.		.15	T.						T.		T.	.18			T.	.58	.02	3.51
Haddonfield	Delaware		.01	1.44	1.38			T.	T.		T.		T.			.18										.12			.08	.43		3.64
Hammonton	Coast			*	*	1.56			.03		T.	T.	T.		.08										T.	.16			.57	.03		2.43
Hightstown	Delaware			2.13	1.04				.07				T.	T.	.15											.19			.30	.36		4.24
Imlaystown	do																															
Indian Mills	Coast			.88	1.15	.11			.05		T.				.12											.15				.64		3.10
Jersey City	do		T.	2.54	1.61	.27		T.	.03		T.		T.	T.	.09	T.						.04		T.		.54			.25	.30		5.67
Lakewood	do		.01	.96	2.01	.17			.03		T.		T.		.10											.13			T.	.51		3.92
Lambertville	Delaware			1.55	1.65				.05		T.	T.	T.	T.		.21										.05			T.	.53		4.04
Layton	do			1.15	2.45	.20			.09																	.36			*	.43		4.68
Little Falls	Passaic																															
Long Branch	Coast			1.82	1.60	1.18			T.		T.			T.	.08								T.			.30			.04	.71		5.73
Mahwah	Passaic			*	*	2.60																				.80				.45		3.85
Moorestown	Delaware		T.	.96	1.15	.03			T.		T.	T.	T.	T.	T.	.17	T.					T.			T.	.08			T.	.34	T.	2.73
Newark	Passaic		.02	2.58	1.42	.35		T.	.02		T.		T.	T.	.02		T.					T.	T.			.60	T.			.41	.18	5.60
New Brunswick	Coast			1.75	.80	.15			.05				T.			.10							.03			.40			*	.68		3.96
Newton	Delaware																															
Northfield	Coast			.67	.74	.03			.01				T.		.01											.11			.04	.61		2.22
Paterson	Passaic		T.	1.54	.92	.24		T.	.07		.02	T.	T.	T.	T.	.06									T.	.32			T.	.51		3.68
Phillipsburg	Delawrare		.03	2.24	.82	.01			.05		T.		.05	.01	.19	T.						.01		T.	T.	.03			.23	.18		3.85
Plainfield	Coast		T.	1.85	.74	.05		T.	.05		.01		T.	.09	T.	.08						T.	T.	T.		.26			.06	.64	T.	3.83
Pleasantville	do			.65	1.01				.10				.02			.02										.12			.25	.43		2.60
Pompton Plains	Passaic			.29	2.28	.76			.02	.08		T.				.09										.41	.08			.52	.13	4.66
Rancocas	Delaware		.02	1.70	.51	T.		T.	T.		.01	T.	T.	T.	.20	.05	T.									.12	T.		.10	.30	T.	3.01
Rivervale	Coast																															
Somerville	do			2.00	1.00	.05			.05		T.		T.	.05		.12										.17			T.	.54		3.98
South Orange	do		.02	2.00	.64	.63			T.		.03		T.	T.	T.	.03							T.			.48			T.	.58		4.41
Sussex	Hudson																															
Trenton	Delaware		.02	1.70	.43				.03				T.			.22										.05			.50	T.	T.	2.95
Tuckerton	Coast			1.08	1.52	.50			.07				T.		.03											.17			*	.77		4.14
Vineland	do																															
Woodbine	do			.61	.70				.04						.13											.12			T.	.59	T.	2.19
West Virginia.																																
Bayard	Potomac		.05				.05				.08	.05	.15	.17	T.	.20	T.	T.					.45		.05	.39		T.	.75	.20	.13	2.72
Burlington	do		T.									T.	T.										.32		.10			T.	.83			1.27
Franklin	do																															
Harpers Ferry ‖	do																							.08		.28			.23	.45		1.04
Lost City	do		T.									T.	T.	T.	T.	T.							T.		.35				.63	*	.10	1.08
Martinsburg	do			.05					.03		T.														.23				.74			1.05
Moorefield	do											T.											.07					T.	.75	T.	T.	0.82
Romney ‖	do		T.	.15									T.	T.									.17	.15		.18			.60	.60	T.	1.85
Upper Tract	do											T.	T.	T.	T.	T.	T.	....					.15			.35		T.	.35	T.	T.	0.85
Maryland.																																
Annapolis	Coast			1.20	2.40																		.15	.20	.35					.42		4.72
Bachmans Valley	do		.03	T.	.12							T.													.17			.14	.40			0.86
Baltimore	do		.11	.47	.79						T.	T.			T.								.11	.04	.11	.07		T.	.23		T.	1.93

TABLE 2.—*Daily precipitation for November, 1910. District No. 1*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Maryland—Continued.																															
Cambridge	Coast			1.09	1.72	.05																	.24		.12	.28			.29	.27	T.	4.06
Cheltenham	do		T.	.70	.81	.03									T.	.07							.13		.06	.40			.27	.15		2.62
Chestertown	do			1.20	1.38	.05																			T.	.05			.40			3.08
Chewsville	Potomac		.04	T.	.11				.02		.03	.05											.10	.04		.09			.64			1.12
Clear Spring	do			.09					T.		T.	.07				T.	T.						.12			.16	T.		.22	.58		1.24
Coleman	do		T.	.86	1.20																				.36					.32		2.74
College Park	do		T.	.52	1.25						T.			T.		T.							.04		.08	.17			.18	.10		2.34
Cumberland	do		.10	.03					.03			.02				T.	T.						T.	.03		.10	.08		.20	.30		0.89
Darlington	Coast		T.	.56	1.28	T.					T.	T.	T.													.15			.06	.22	T.	2.27
Denton	do			.83	1.26	.06										T.							.08			.22			.11	.25		2.81
Easton	do			1.05	1.48	.13																	.06	T.		.27			.12	.35		3.46
Emmitsburg	Potomac		.03								.07	.06				.03						T.			.04	.14			.22	.34		0.93
Fallston	Coast		T.	.36	1.30	T.			T.		T.	T.	T.			.01							T.		T.	.20			.01	.21	T.	2.09
Frederick	Potomac		.02		T.						T.	T.			T.								.18		T.	.25			.33	.26		1.04
Frostburg	do		.01						T.		.04	.08	.08		.04	.05	T.						.12		.03	.05			.71	.09	.06	1.36
Great Falls	do			.08	.03	.10																		.08	.07	.20			.04	.07		0.67
Green Spring Furnace	do		.07								.05	.06											.27			.09			.38	.40		1.32
Keedysville	do		.05		T.				.03		.02	.04				T.							.10		.01	.12			.30	.42		1.09
Lake Montebello	Coast		.09	.35	.82	T.					T.			T.	T.	T.							.04		.05	.25			.22	T.	T.	1.82
La Plata	do		T.	.68	.72											.04							T.		‖.07	‖.05			.50			‖2.06
Laurel	do		T.	.32							T.												T.		.15	.22			.65			1.34
Monrovia	Potomac		.01	.05	.29						T.	T.				T.							.02		.04	.26			.24	.27		1.18
Pocomoke City	Coast			.53	.73	.05									.05	.02									‖.07	‖.18			.42			‖2.05
Porto Bello	do																															
Princess Anne	do			.41	.42	.02									.11								T.		.07	.22			.49			1.74
Rockville	Potomac																															
Salisbury	Coast		T.	.60	.90	.07			T.						.02	.03							.08		.08	.19			.48	.02		2.47
Sanatorium	Potomac		.05		.25	T.			.07		.05	.15		T.		T.							T.		T.	.10			.35	.30	T.	1.32
Solomons	Coast		.10	.70	.25										.02								T.	T.	.08	.04		T.	.33			1.52
Sudlersville	do		.04	1.30	2.05	.10			T.		T.	T.	T.	T.		.07							T.		.07	.18	T.		.09	.36	T.	4.26
Takoma Park	do			.38	.25	.38										.03								.07	.12	.20			.14	.18		1.75
Taneytown	Potomac				.02								.03												.07			*	.80			0.92
Towson	Coast		T.	.30	1.03							T.				T.							.08			.28			T.	.19		1.88
Van Bibber	do		.12	.64	1.07						T.		*										T.			.32			.38	.02		2.55
Western Port	Potomac											T.				T.							.22		.25	.07		.15	.65	.02	.03	1.39
Woodstock	Coast			.18	.31	T.						T.	T.			.01			T.				.11		.05	.30		.01	.10	.02	.25	1.34
Delaware.																																
Delaware City	Coast		T.	.73	.86	T.			T.				T.			T.										T.				.64		2.23
Dover	do				.93	1.20																				.30				.43		2.86
Milford	do			.88	.94	.17										.07							.04			.14	.02		.12	.31		2.69
Millsboro	do			.40	.75										.12								.03			.29			.58			2.17
Seaford	do		T.	.78	.73	.07										.04							.08			.15			.14	.27		2.26
District of Columbia.																																
Washington	Coast		.19	.50	1.01						T.				.02	T.							.06	.06	.12	.04		.10	.18	T.		2.28
Virginia.																																
Culpeper	Rappahannock		*	.35											.06										.11				.51			1.03
Dale Enterprise	Shenandoah		.02	.04							T.	T.	T.	T.	.10	T.								T.	.12			.25	.27	T.	T.	0.80
Doswell	Pamunky																															
Eastville	Coast			.35	.32										.11	.06													.43	.08		1.35
Fredericksburg	Rappahannock		.02	.52	.01										.01	.06							T.		.05	.07			.45	.04		1.23
Lincoln	Potomac		.05		T.										T.											.38			.55	.18		1.16
Mount Weather	do		.01	.06	T.				.01		T.	T.		T.	T.	T.							.10	T.	.06	T.		.18	.51	T.	T.	0.93
Quantico	do		T.	.67	.17											T.							T.			.90			1.00			2.74
Staunton	Shenandoah		.05								T.	T.	T.		.09	T.								.02	.30	T.		.21	.20	T.		0.87
Stevens City	Potomac			.05																					.10	.08			.51	.25		0.99
Warsaw	Rappahannock		T.	.95	.80										.10	.13							.02		T.	.25			.52		T.	2.77
Woodstock	Shenandoah		.02								T.	T.				T.							T.			.19			.58	.09		0.88

‖ Estimated.

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 1, North Atlantic States.*

Date	Maine.												Concord, N. H.		Massachusetts.								Providence, R. I.		Connecticut.			
	Eastport.		Greenville.		Orono.		Portland.		Presque Isle.		Rumford Falls.				Amherst.		Boston.		Middleboro.		Nantucket.				Cream Hill.		Hartford.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	51	34	52	23	56	21	54	31	55	20	50	25	55	24	59	24	54	38	58	21	57	42	57	34	59	36	59	31
2	50	43	50	35	54	30	52	45	54	33	52	32	56	30	61	31	61	44	60	26	56	44	57	36	52	41	60	39
3	48	40	49	38	54	29	49	43	50	33	49	44	48	41	49	40	52	46	55	46	54	49	55	46	46	39	52	40
4	51	43	42	37	52	40	48	42	47	37	48	45	49	41	46	40	52	47	51	45	56	48	51	47	44	36	46	41
5	49	45	47	41	49	43	50	46	48	42	53	46	54	43	57	42	54	45	51	42	54	48	52	42	42	35	55	42
6	50	45	44	35	48	43	50	49	46	38	46	32	50	36	48	37	52	40	49	35	53	46	50	39	47	30	50	38
7	45	38	41	30	47	32	42	33	42	34	38	32	42	29	44	28	46	34	45	28	46	39	44	33	37	27	44	31
8	40	31	33	26	46	24	44	20	38	30	38	32	43	30	34	25	42	32	39	23	43	38	38	30	32	26	36	29
9	36	30	29	24	40	27	42	28	32	24	34	26	44	27	45	32	47	34	47	25	48	37	45	32	34	23	45	28
10	44	27	32	17	36	18	36	27	42	18	34	25	37	29	50	36	51	40	59	35	59	42	58	39	40	26	60	41
11	51	31	36	29	44	32	49	33	34	30	44	34	47	32	45	29	51	36	55	35	55	38	54	32	36	27	52	33
12	39	30	37	26	42	21	36	31	38	25	39	34	40	26	42	26	44	31	43	21	43	35	41	29	35	25	40	30
13	41	31	33	24	44	22	39	28	35	22	36	28	39	26	38	24	42	29	43	20	43	34	42	28	39	25	40	28
14	36	31	36	25	43	19	42	29	.....	.....	38	24	41	26	44	26	44	32	45	24	43	35	43	30	36	24	43	31
15	36	29	35	23	40	16	40	31	34	24	36	27	40	25	42	26	41	34	42	22	43	36	40	30	38	25	40	33
16	35	28	30	26	38	24	41	27	33	28	34	31	39	29	40	29	44	34	43	25	43	35	41	31	39	24	40	33
17	39	32	33	29	43	31	44	32	38	31	36	32	42	32	39	28	44	34	44	28	44	34	42	32	36	27	40	34
18	40	28	31	22	42	28	41	29	35	26	32	28	42	29	45	36	46	31	47	17	45	34	47	31	39	24	44	33
19	31	25	27	21	40	21	37	25	29	24	32	27	36	25	40	24	44	29	44	27	45	33	42	27	34	25	40	27
20	36	26	30	21	41	22	40	24	36	20	34	25	39	23	40	20	42	26	41	13	37	30	42	21	36	18	39	22
21	38	23	38	15	41	15	39	23	38	15	38	16	40	15	42	15	48	28	48	11	46	34	48	22	37	20	46	22
22	44	32	33	21	37	23	39	32	28	14	34	28	35	30	40	34	44	38	47	28	53	39	47	36	42	29	44	36
23	39	31	32	28	39	27	43	33	30	24	39	34	45	31	46	32	43	38	42	34	45	40	44	35	44	28	47	36
24	40	32	31	26	37	29	43	33	30	27	39	32	46	31	52	34	52	41	51	24	51	39	52	36	50	34	52	39
25	44	39	36	25	39	31	37	30	35	29	37	29	39	29	38	32	45	38	42	24	45	41	41	36	36	30	42	34
26	40	30	32	28	36	31	41	34	33	28	40	28	41	34	43	30	44	35	42	31	42	37	43	34	35	24	42	34
27	38	31	29	25	35	26	39	33	35	27	38	32	40	33	45	31	42	36	43	33	40	38	45	35	34	22	44	32
28	38	35	34	29	39	32	42	34	36	29	43	32	44	29	40	31	42	36	40	31	43	39	41	36	38	28	41	30
29	39	36	34	31	38	32	36	32	37	33	36	33	36	32	36	32	42	35	43	37	45	40	38	33	36	31	37	32
30	45	39	32	29	37	31	36	32	34	31	36	34	40	32	36	31	42	34	41	32	42	37	40	32	37	30	38	33
Mns..	41.8	33.2	35.9	27.0	42.6	27.3	42.4	32.0	38.0[a]	27.5[a]	39.4	30.9	43.0	30.0	44.2	30.2	46.6	35.8	46.7	28.1	47.3	38.7	46.0	33.5	39.7	28.0	45.3	33.1

Date	New Haven, Conn.		New York.												Pennsylvania.												Asbury Park, N. J.	
			Addison.		Albany.		Binghamton.		Cooperstown.		Indian Lake.		New York.		Everett.		Harrisburg.		Philadelphia.		Scranton.		State College.		Wellsboro.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	59	34	64	24	58	28	57	27	54	44	50	22	61	45	59	27	61	36	62	45	59	33	59	31	60	22	60	40
2	60	32	57	40	60	44	51	36	53	33	52	38	65	51	54	35	50	43	65	48	57	42	53	39	52	35	63	56
3	55	43	40	30	44	35	38	29	38	34	45	29	51	39	44	34	45	33	50	36	42	30	42	34	38	31	61	50
4	48	43	36	32	42	34	38	29	35	34	39	28	46	39	44	32	42	33	43	38	38	30	38	30	35	30	59	40
5	53	42	45	34	46	39	37	34	37	33	40	33	50	41	41	33	48	40	51	43	40	37	42	31	45	33	52	41
6	51	39	44	34	46	35	41	31	36	28	39	39	48	36	43	21	44	32	51	38	42	30	50	30	41	32	50	40
7	45	32	36	26	42	32	37	28	36	24	34	27	44	32	42	22	41	29	46	33	37	29	35	25	35	29	46	30
8	36	32	42	29	42	29	35	28	36	30	35	22	40	34	43	28	45	30	50	37	38	30	40	29	37	28	45	31
9	48	31	44	25	44	33	40	29	34	32	37	25	50	35	61	23	56	34	53	38	46	33	55	29	39	26	51	30
10	62	42	56	36	58	36	55	38	56	32	40	30	63	46	52	33	60	39	66	45	64	38	57	43	46	29	63	45
11	49	33	45	31	47	31	38	32	46	27	42	29	47	34	38	30	44	32	49	35	42	32	42	30	53	27	61	40
12	42	30	34	28	40	30	33	29	34	27	34	22	40	32	36	30	41	34	45	34	33	29	35	26	34	27	43	30
13	41	28	39	30	39	30	34	29	34	28	32	24	43	32	58	32	42	37	46	36	38	32	35	27	35	26	44	30
14	45	33	37	31	42	31	34	29	36	29	35	25	43	34	50	31	43	33	45	36	38	30	38	25	38	30	43	34
15	42	33	41	30	40	33	35	29	34	28	31	17	43	34	40	32	41	33	46	36	37	30	40	26	37	28	42	32
16	44	33	36	30	38	32	34	30	32	28	30	21	41	36	40	32	43	38	46	39	36	31	37	29	36	29	43	35
17	47	32	40	32	37	32	35	33	32	29	27	22	44	37	34	31	42	35	49	37	40	33	34	29	36	28	46	37
18	47	29	36	31	40	30	34	30	34	28	35	10	45	35	35	30	36	33	42	35	36	32	32	29	35	31	45	30
19	45	28	37	29	38	26	33	26	30	20	34	17	43	32	35	32	38	34	46	34	37	29	34	28	37	29	45	28
20	43	23	41	29	35	25	33	22	26	12	33	15	41	29	47	15	41	28	42	31	36	25	38	22	38	24	46	37
21	47	25	41	17	41	19	40	19	38	20	35	4	47	33	44	18	44	25	46	30	43	23	39	21	40	17	46	25
22	48	38	39	30	41	34	38	34	36	31	39	23	48	39	40	23	45	32	50	40	41	34	39	31	38	30	50	35
23	50	36	45	25	44	32	44	31	38	33	37	21	48	36	46	24	46	34	47	38	47	34	43	29	44	26	52	38
24	53	40	51	37	50	35	48	38	41	31	38	27	52	39	57	25	52	33	55	39	50	38	51	32	50	34	58	40
25	42	36	43	35	44	34	41	33	37	30	35	21	47	39	44	33	46	40	50	44	44	34	47	32	45	32	45	30
26	43	36	36	32	42	32	35	30	34	27	33	26	42	36	38	34	43	36	46	39	38	33	63	30	37	29	45	30
27	43	34	38	31	43	30	33	25	30	20	36	23	46	34	42	20	44	35	50	36	37	29	39	27	37	28	47	35
28	46	31	37	24	40	27	39	24	34	20	.....	.....	45	35	40	28	38	33	42	34	39	28	45	27	34	26	45	30
29	37	33	37	31	36	32	36	32	36	30	.....	.....	40	37	35	31	39	33	45	38	41	33	36	32	37	30	54	30
30	39	31	34	29	38	32	32	29	32	29	.....	.....	39	32	33	23	35	31	42	35	35	30	32	27	34	28	45	32
Mns..	47.0	34.4	41.7	30.1	43.2	31.7	38.6	29.8	37.0	28.4	36.9[a]	23.4[a]	46.7	36.4	43.8	28.1	44.5	33.9	48.9	37.6	41.7	31.7	42.3	29.3	40.1	28.5	49.8	35.4

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 1*—Continued.

Date.	New Jersey.								Martinsburg, W. Va.		Maryland.								Millsboro, Del.		Washington, D. C.		Virginia.					
	Atlantic City.		Hightstown.		Newton.		Phillipsburg.				Baltimore.		Darlington.		Frederick.		Western Port.						Culpeper.		Fredericksburg.		Staunton.	
	Max.	Min	Max.	Min	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	62	42	64	29	.....	.....	62	30	63	30	60	40	60	32	63	30	66	26	65	30	62	34	60	30	64	31	66	33
2....	64	50	70	40	.....	.....	61	40	50	34	59	48	62	42	51	36	56	39	70	36	57	44	54	38	60	38	57	36
3....	50	39	58	39	.....	.....	45	33	48	40	48	33	53	35	50	40	49	28	53	35	46	33	49	39	53	40	52	38
4....	46	39	44	37	.....	.....	42	33	45	31	42	33	37	32	47	34	45	34	42	32	44	32	47	37	45	36	51	33
5....	53	41	54	40	.....	.....	50	40	48	38	54	42	50	32	50	40	44	34	53	37	52	41	52	35	57	41	50	29
6....	52	33	51	37	.....	.....	47	32	47	36	49	35	49	32	47	36	46	36	55	34	49	36	50	29	55	32	48	30
7....	46	29	44	27	.....	.....	43	28	46	29	44	32	40	26	44	30	48	22	48	28	46	31	44	24	51	23	54	22
8....	52	37	44	29	.....	.....	40	30	49	30	54	37	49	26	51	33	49	35	57	28	54	34	56	34	61	30	57	30
9....	54	33	53	28	.....	.....	51	31	60	29	59	35	54	29	57	32	71	25	58	28	59	30	59	27	62	27	66	30
10....	60	46	69	39	.....	.....	62	37	66	34	64	48	67	38	65	40	59	37	71	40	66	47	62	41	69	44	61	43
11....	50	33	56	35	.....	.....	46	30	44	40	49	34	59	33	52	34	46	30	54	36	49	33	57	32	63	33	44	35
12....	44	33	42	29	.....	.....	39	29	42	33	44	34	43	30	42	32	36	29	47	32	44	32	45	31	48	30	38	29
13....	47	34	46	26	.....	.....	42	30	42	35	46	40	44	30	44	39	36	33	50	34	45	40	41	35	47	36	45	30
14....	47	37	47	32	.....	.....	43	32	47	38	48	37	45	37	47	38	43	35	51	35	47	36	47	26	47	28	38	24
15....	46	34	44	29	.....	.....	41	29	43	37	46	37	44	33	44	37	40	34	49	33	46	36	45	32	46	31	45	29
16....	46	38	44	34	.....	.....	41	34	43	37	47	38	46	33	44	38	38	34	49	34	44	39	46	37	47	33	41	33
17....	47	34	48	37	.....	.....	46	35	41	36	46	36	45	37	42	36	35	33	48	31	44	37	44	22	48	22	50	27
18....	44	31	45	29	.....	.....	38	31	45	33	44	35	39	33	44	34	36	32	46	27	48	30	46	22	49	22	52	28
19....	46	29	46	26	.....	.....	45	28	43	33	45	35	43	30	43	31	41	32	46	25	44	32	42	23	45	25	47	28
20....	44	26	45	20	.....	.....	45	25	43	19	43	29	39	22	42	18	44	14	43	22	46	26	41	24	45	25	45	19
21....	49	28	49	18	.....	.....	44	19	49	19	47	28	44	18	49	18	42	17	56	18	49	23	51	18	53	18	51	21
22....	51	33	50	27	.....	.....	47	30	44	20	48	38	45	29	43	31	40	30	56	30	44	34	47	26	47	29	51	30
23....	47	30	50	26	.....	.....	46	30	48	24	48	36	48	31	47	28	48	23	51	27	48	31	48	20	50	27	48	20
24....	57	44	55	34	.....	.....	53	35	54	25	55	38	55	32	54	31	53	30	60	32	54	33	58	29	59	31	55	23
25....	51	38	48	37	.....	.....	47	38	49	30	51	42	48	32	50	38	48	38	55	31	51	35	51	38	56	39	50	38
26....	46	35	44	35	.....	.....	41	34	45	37	48	36	45	34	46	36	43	33	48	32	48	33	47	28	49	26	50	30
27....	49	32	49	29	.....	.....	47	30	45	25	47	33	46	31	44	26	38	22	50	27	47	30	42	25	46	25	44	24
28....	46	34	43	25	.....	.....	39	27	39	25	43	36	42	31	42	35	39	34	45	33	41	38	41	36	45	30	41	27
29....	43	37	40	35	.....	.....	40	32	40	33	45	36	42	34	43	32	39	32	46	35	43	36	43	35	45	36	37	35
30....	41	33	42	30	.....	.....	38	30	36	32	37	32	39	32	38	31	33	27	39	30	38	32	37	28	42	24	34	27
Mns..	49.3	35.4	49.5	31.3	.....	.....	45.7	31.4	46.9	31.2	48.7	36.4	47.4	31.7	47.5	33.1	45.0	30.3	52.0	31.1	48.5	34.3	47.4	30.0	51.8	30.6	48.9	29.4

Climatological Data for November, 1910.

DISTRICT No. 2, SOUTH ATLANTIC AND EAST GULF STATES.

CHARLES F. VON HERRMANN, District Editor.

GENERAL SUMMARY.

Throughout most of the South Atlantic and east Gulf States November, 1910, was cold and dry, but very pleasant for outdoor work and favorable for the harvesting of crops. The temperature for the district averaged nearly 3° below the normal; at several places the departure exceeded 6°, the greatest deficiency at any regular Weather Bureau station being 6.4° at Richmond, Va. Extremely dry weather prevailed in many sections, especially in northern Georgia, northwesterr South Carolina, and western Virginia, where rivers and creeks at the close of the month were very low and the ground dry and dusty. In Alabama the least precipitation occurred in the Coosa and upper Black Warrior watersheds. In the region between Rome and Augusta, Ga., the monthly rainfall was the smallest on record for November in 20 years at all points, and the Chattahoochee River was so low that there was a scarcity of water for the use of hydroelectric power plants. The snowfall was unusually small.

At the beginning of the month an area of high atmospheric pressure existed over the district, and the highest pressure for the month occurred at all points on the 1st, the maximum being 30.37 inches at Lynchburg, Va. The only disturbance that passed directly over the section was the moderate storm that crossed the southern portion of the Gulf States on the 18th to 20th. This depression was first observed near Mobile, Ala., on the morning of the 18th; on the morning of the 19th it extended as an ill-defined barometric depression from Mobile to Jacksonville, and by the 20th it had moved to the southeastern portion of the Flordia Peninsula. It was accompanied by general rains in the southern portion of the district with large amounts at a few points in southern Georgia and northwestern Florida. The lowest pressure for the month, however, occurred at all points on the 28th during the passage of a marked area of low atmospheric pressure from Kansas on the 27th, over the Ohio Valley on the 28th, to New England near the end of the month. The lowest pressure registered was 29.47 inches at Hatteras, N. C., giving a range for the month of 0.90 inch. It is noteworthy that for a long period, namely from the 7th to 18th, the pressure remained very low over Nova Scotia.

North to northwest winds prevailed during the month with moderate wind movement. The number of clear days was large and amount of sunshine abundant. Killing frosts occurred throughout the district on many dates, in northern Florida chiefly on the 5th, 7th, 8th, 29th, and 30th. A few thunderstorms occurred, the largest number being reported in Alabama on the 27th.

TEMPERATURE.

The temperature was below normal over the entire district; the deficiency, however, was less than 2° over a large portion of western Florida, southwestern Georgia, and the southern half of Alabama and Mississippi, but it increased to over 4° in southeastern Florida and to over 6° in the northeastern portion of the Virginia area. The mean temperature for the entire district was 51.4°, and the deficiency 2.8°. The lowest state averages and the greatest deficiencies occurred in Virginia and North Carolina. The lowest state mean was 42.7° for Virginia, the highest 61.1° for Florida.

The month was characterized by the lack of uniformity in the occurrence of the alternate periods of moderately cold and moderately warm weather, the highest temperatures, for instance, occurring in various States on the 2d, 9th, 10th, 14th, or 15th, and the lowest on the 4th, 7th, 13th, 21st, 23d, or 30th. As a rule, however, with one exception the periods during which the temperature was above normal were of short duration, and centered chiefly about the 1st and 2d, 9th and 10th, and 24th to 28th. The longest cold periods extended from the 3d to 8th, and from the 15th to the 23d.

The highest monthly mean was 70.4° at Key West, Fla., the only place having a November mean above 70°. Monthly mean temperatures exceeding 60 occurred at 32 places in Florida, but in no other State in the district. The lowest monthly mean was 35.0° at Hot Springs, Va. The highest temperature reported was 89° on the 2d at Orange City, Fla., and the lowest 16° at Hot Springs, Va., on the 23d.

PRECIPITATION.

Under normal conditions November is the driest month of the year in every portion of the district, no State receiving, on the average, as much as 3 inches of rain. Any marked deficiency for the month, therefore, means a more or less serious drought; wells and small creeks may fail, large rivers attain the minimum stage of flow and at times there may be an actual scarcity of water. These conditions were accentuated during the current month, especially in the northern portions of the district. The average rainfall for the district determined from the records of all stations was 1.63 inch and the deficiency 1.09 inch. The monthly precipitation was less than 1 inch at 156 out of a total of 341 stations, and was greater than 3 inches at 43 stations. The state average was smallest for North Carolina, namely, 0.71 inch, with a deficiency of 2.01 inches, and was greatest for Mississippi, average 2.53 inches, with a deficiency of 0.98 inch. The current month was drier than any November during the past 20 years in northern Georgia and northwestern South Carolina. A smaller monthly rainfall than for November, 1910, has occurred in November at Rome, Ga., but four times in 55 years; at Atlanta but twice in 45 years. In Florida the precipitation averaged lower than for any November since 1891, except November, 1901.

The rainfall exceeded 4 inches in two small regions comprising the central portion of the Mississippi area, and in extreme southwestern Georgia and adjoining portions of Florida. Throughout the remainder of the district the rainfall was under 3 inches and was fairly well distributed.

The rainfall occurred in fairly distinct periods, centering about the 3d, 6th, 10th, 16th to 20th, and 27th to 29th. The rains of the 18th to 20th were general, except in North Carolina and Virginia, with large amounts at a few stations, Thomasville, Ga., receiving 4.17 inches on the 18th and 19th, and Apalachicola, Fla., 2.52 on the 19th. The rains of the 27th and 28th were more general, but smaller in amount. A number of stations reported thunderstorms on the 27th, especially in Alabama.

The greatest monthly rainfall for the district was 5.57 inches at Laurel, Miss., closely followed by Thomasville, Ga., with 5.27 and Thomasville, Ala., with 4.92 inches. No rain occurred during the month at Chapells, S. C. The average number of days with rain was 4 or 5. Traces of snow fell in northern Alabama, at one station in North Carolina, and at a few in Virginia. The only measurable snowfall reported was 0.2 inch (unmelted) at Newport News, Va.

RIVER CONDITIONS.

The rivers throughout the district remained at very low stages during the entire month. At nearly all points the mean stages for the month were much below the normal

flow. This was the case at nearly every river station in Georgia, as well as at many stations in other States. For example, at Alaga, Ala., on the Chattahoochee River, the normal stage for November is 3.9 feet, mean for the current month 1.5 feet; at Eufaula the normal stage is 2.5 feet, mean for November, 1910, 0.5 foot. Under these conditions all the rivers maintained a very uniform flow, the differences between the highest and lowest stages rarely reaching as much as 1 foot. At many points the water did not flow over the dams of the various hydroelectric companies, and in some cases auxiliary steam power had to be used.

MISCELLANEOUS PHENOMENA.

The prevailing winds during the month were from the northwest, and the wind movement not as large as usual for November. The average hourly movement exceeded 10 miles an hour only at Hatteras, average hourly movement 15.7 miles; at Atlanta, 14.2 miles; at Savannah, 12.6 miles; and at Pensacola, 11.9 miles. Wind velocities exceeding 40 miles an hour occurred at but two points, Hatteras reporting 42 miles from the north on the 4th, and Pensacola 58 miles from the south on the 28th. The average number of clear days was 18, ranging from 13 in Mississippi to 21 in Florida and North Carolina; the average number of partly cloudy days was 6, and of cloudy days 6.

Local storms.—A severe thunderstorm occurred at Roanoke Rapids, near Weldon, N. C., on November 14 at about 6 p. m. A single brilliant flash of lightning from a sky only partly cloudy struck the Baptist Church, demolishing the entire front, and was conducted into twelve residences by telephone and electric-light wires, doing more or less damage to each house. A boy in the church was killed, and several people on the streets were stunned by the flash.

THE WATERPOWER RESOURCES OF GEORGIA.

By CHARLES F. VON HERRMANN, District Editor.

The utilization of the force of gravity through the medium of falling water and its conversion into electric energy for convenient distribution over adjacent territory furnishes the cheapest form of energy known to man. It is not surprising then that hydroelectric power is supplanting steam in many portions of the country and that the rapid industrial development of a community is becoming more and more dependent upon the available waterpower.

Although the use of waterpower in Georgia on a somewhat large scale began with the building of the dam at the head of the Augusta Canal in 1845, it is probable that at present but a tenth part of the possible power at the minimum flow of its rivers is utilized. Mr. George M. Chapin, of Atlanta, in an article in The World's Work for September, 1910, estimated the possible waterpower of Georgia at almost 500,000 horsepower. His table is reproduced here:

The horsepower of the six great basins of Georgia.

Name of basin.	Minimum horsepower.	Minimum horsepower for 6 high-water months.
Savannah	175,462	209,184
Ogeechee	3,895	9,730
Altamaha	47,088	78,272
Apalachicola	173,786	281,550
Mobile	57,524	95,804
Tennessee	33,895	65,333
Total	491,650	799,873

The rivers of Georgia can be depended on to supply easily nearly 500,000 horsepower at normal river stages, while during the six months of greatest average flow this rises to nearly 800,000 horsepower. The construction of water-storage reservoirs and the use of auxiliary steampower during periods of drought increases the possibilities considerably.

The rivers of Georgia nearly all rise within or close to the boundaries of the State, and the most important have their sources near the northeast corner; they form nine distinct drainage basins, which discharge into the Atlantic Ocean and the Gulf of Mexico. Five of these basins have that portion of their territory containing the chief available water powers between the "fall lines," the southern of which extends from Augusta through Milledgeville and Macon to Columbus, and the western, which passes through Polk, Bartow, Gordon, and Murray Counties in the northwestern part of the State.

The dividing line between the waters entering the Atlantic Ocean and those flowing into the Gulf of Mexico is formed by the Chattahoochee Ridge, which enters the State from North Carolina at the boundary between Rabun and Townes Counties, passes southwest to Atlanta, thence south to Culloden and Fort Valley, Houston County, then in a southeasterly direction through Okefenoke Swamp between St. Marys and Suwannee Basins into Florida. The largest rivers east of this "backbone" of Georgia are the Savannah, with its most important tributaries, the Tugaloo, Chattooga, Tallulah, and Broad, and the Altamaha, which is formed by the union of the Oconee and Ocmulgee Rivers. West of the divide are the Flint and the Chattahoochee, which join to form the Apalachicola, the Mobile, and the Tennessee Basins. The greatest development of waterpowers is found at Augusta on the Savannah River and at Columbus on the Chattahoochee. The falls of the Chattahoochee are said to be the most numerous in the entire eastern Appalachian Mountain region and are capable of supplying an enormous amount of power. Figure 1 shows some of the most important waterpower sites, as well as the drainage basins of that part of the State.

THE SAVANNAH RIVER.

The Savannah River marks throughout its entire length the boundary line between South Carolina and Georgia, and is formed by the union of the Tugaloo and Seneca Rivers, which have their ultimate sources in the Blue Ridge Mountains of western North Carolina. The river is 355 miles long but only about half of that length in a straight line. Above Augusta the width of the basin is from 40 to 50 miles, comprising a total area of about 7,294 square miles. The river is navigable to Augusta, and from that point to the head of the river, a distance of about 180 miles, there are 19 important shoals. The longest is Trotters Shoal, 64 miles above Augusta, which is 7 miles long with a fall of 75 feet, and the shortest is Bowmans Ledge, 83 miles above Augusta, which is 120 feet long with a fall of 3 feet. The total fall of the river from the top of McDaniels Shoal to the foot of Augusta Shoal is 448 feet. An important feature is the great height of the shoals on some of the larger tributaries, as, for example, Tallulah Falls, in Rabun County, which has a total fall of 525 feet in a distance of 2¾ miles, and Anthony Shoals on the Broad River, in Elbert and Lincoln Counties, which has a fall of 90 feet.

The river valley below Augusta has an average width of 30 miles and a total drainage area of 3,211 square miles. The banks are at first quite high, averaging 25 feet above low-water level at Augusta, but decrease to a few feet at Cross Tides. For 30 miles below Augusta the width of the river varies from 500 to 900 feet, but for the remainder of the distance to Savannah the average low-water width is 300 feet.

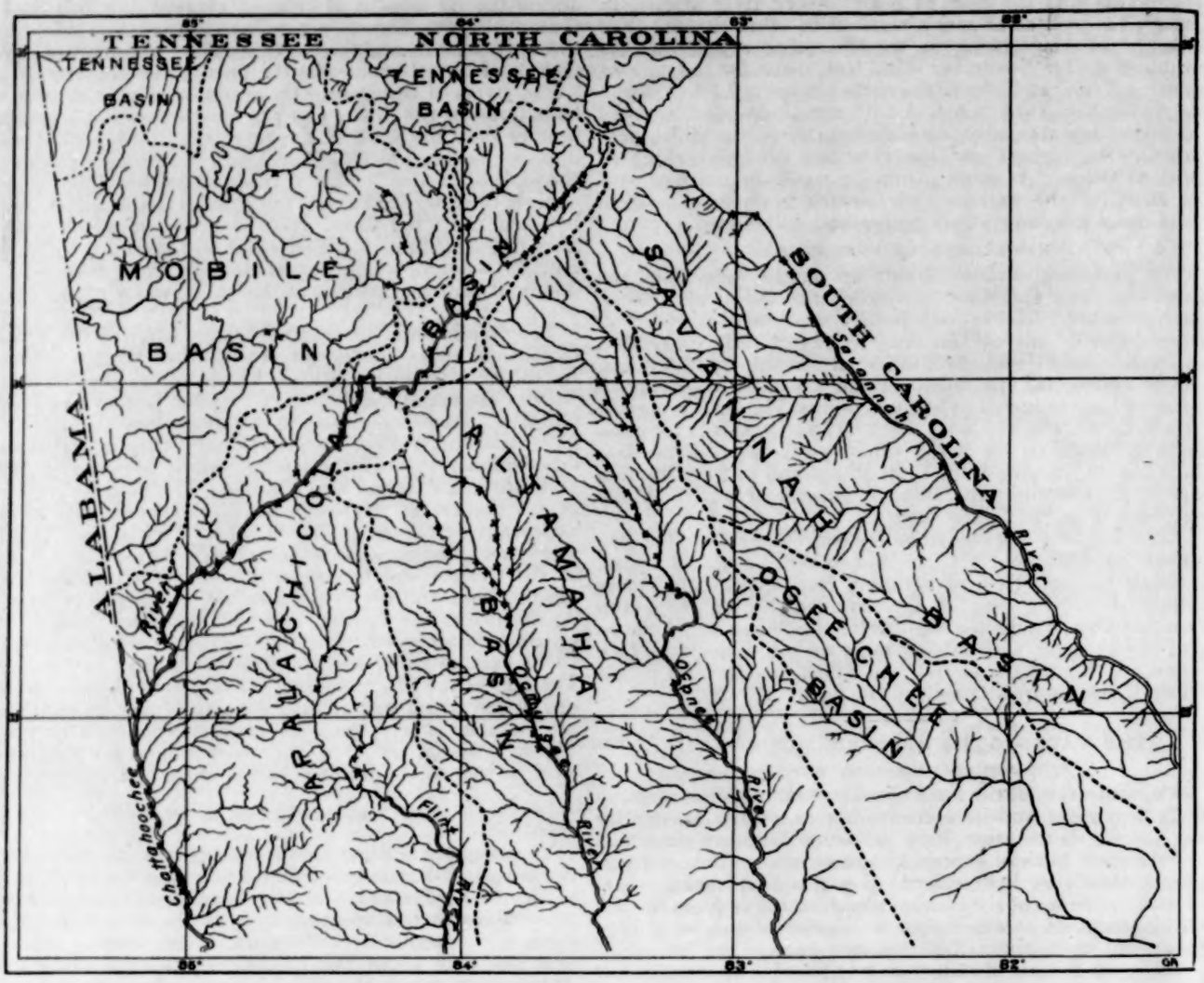


FIG. 1.—Hydrographic map of Georgia, showing the drainage basins of Georgia and the location of some of the waterpower sites. By B. M. Hall, 1896. Waterpower sites.

Principal shoals on the Savannah River and its main tributaries.

Stream and location.	Name of fall or shoal.	Distance from Augusta.	Length of shoal.	Fall.	Width of river
Savannah River.		*Miles.*	*Feet.*	*Feet.*	*Feet.*
Richmond County	Augusta		37,000	50	560
Columbia County	Blue Jacket Shoal		600	10	
Lincoln County	Long Shoal	29½	26,000	35	1,800
Elbert County	Trotters Shoal	64	37,000	75	570
Do	Cherokee Shoal	75	2,640	9	1,800
Do	Bowmans Ledge	83	120	3	600
Do	Greggs Shoal	85½	5,280	14	1,300
Do	Middletons Shoal	88½	5,280	18	2,100
Do	Ferrells Ledge	89	360	3	960
Hart County	Watts Ledge	91½	900	25	900
Do	McDaniels Shoal	95	26,000	30	1,500
Tugaloo River.					
Habersham County	Mouth of Tallulah River		13,000	75	
Franklin County	Eastonolly Shoals	131	2,640	4	750
Do	Stribling Shoals	130	2,640	2	300
Hart County	Guest Shoal	113½	5,280	17	1,200
Do	Hatton Shoal	110	8,000	39	1,500
Tallulah River.					
Rabun County	Tallulah Falls		4,000	335	
Broad River.					
Elbert County	Bakers Ferry		600	3	
Do	Anthonys Shoals		6,600	70	
Do	Smiths Shoals		2,640	10	

The average rainfall for the Savannah River Basin, together with the mean river stages at three points, Carlton on the Broad and Calhoun Falls and Augusta on the Savannah, are given in the table at the end of this article.

The first shoals above Augusta, having a fall of 75 feet in 2½ miles, supplies water for the Augusta Canal, which is 8 miles long, with a capacity of about 3,000 cubic feet of water per second. The dam is 1,720 feet long, 10.63 feet high on the average, and is built of solid stone in cement on a foundation of solid rock. It is located about 7 miles above Augusta. The fall at Augusta between the level of the canal and low water in the river is about 50 feet, but all of it can not be utilized economically. The available power is estimated at 12,000 horsepower. The city of Augusta owns this power and the water is leased to mills at $5.50 per horsepower.

Further extensive developments of power on the Savannah River are under way. The Twin City Company will develop a 32,000-horsepower plant at Prices Island, 22 miles north of Augusta, and other developments are contemplated at Anthonys Shoals and Calhoun Falls. The Piedmont Power

Company of Atlanta will develop power from the Tugaloo, Chattooga, and Tallulah Rivers, which will be transmitted to Atlanta.

THE CHATTAHOOCHEE AND FLINT RIVERS.

Attention may now be invited to the position and form of the Chattahoochee River Basin, which is very narrow in proportion to its length. The river has its sources in Habersham and White Counties, whence its course is southwesterly to West Point, Ga., where it bends southward and forms the boundary between Georgia and Alabama to its point of junction with the Flint River south of Bainbridge. As far south as Columbus the stream flows upon crystalline rocks and is frequently obstructed by shoals, rapids, and low falls. From Thompsons Bridge in Hall County to West Point, a distance of about 180 miles, the fall is 386 feet, while from West Point to Columbus, a distance of only 34 miles, the fall is 362 feet. The combination of great fall and large volume of water make at Columbus a waterpower which is the largest in the State and is well utilized. Thompsons Bridge, near Gainesville, is 615 miles from the mouth of the river, and Columbus, which is at the head of navigation, is 400 miles from the Gulf by the river. The drainage area above Columbus is 4,561 square miles. There are at least 50 shoals on the Chattahoochee River. The most important are Harget Island Shoals, capable of furnishing about 22,000 horsepower, and Mulberry Creek Shoals, 12,000 horsepower. The shoals near Columbus from a point 4½ miles upstream down to navigable water at Columbus furnishes an available force of nearly 48,000 horsepower.

Principal shoals on the Chattahoochee River.[1]

Stream and location.	Name of fall or shoal.	Distance from Columbus.	Length of shoal.	Fall.	Width of river.
		Miles.	*Feet.*	*Feet.*	*Feet.*
Muscogee County	Columbus	4½	22,440	120	(2)
Harris County	Mulberry Creek Shoals	10	10,560	30	1,000
Do	Tate Shoals	12	5,280	22	650
Do	Mountain Shoal	18	5,174	20	1,100
Do	Hargett Island	22	15,840	60	1,300
Do	Jack Todds Shoals	27	39,600	51	(2)
Troup County	Potts Shoal	36	3,600	5	
Heard County	Jackson Mill Shoals	52	475	5	830
Do	Bush Head Shoal	60	2,112	5	1,000
Carroll County	McIntosh Shoals	68	3,800	7	1,200
Campbell County	Mederis Shoal	82	7,392	8	600
Cobb County	Paces Ferry	100	4,250	6	300
Do	Devils Race Course	102	10,560	20	450
Fulton County	Bull Sluice	111	10,560	40	(2)
Do	Roswell Shoal	113	10,250	13	600
Milton County	Island Ford	110	5,016	9	800
Forsyth County	Garners Shoal	128	11,880	17	(2)
Hall County	Shallow Ford	145	2,300	7	300

[1] For a complete list of the shoals on the Chattahoochee and its tributaries, see Twentieth Annual Report of the United States Geological Survey, Part IV—Hydrography, pp. 175, 176.
[2] The river varies in width from 300 to 1,500 feet with channel divided by islands.

Columbus is the most important center of waterpower development in the State of Georgia. The largest dam in active use is the North Highland Dam of the Columbus Power Company, which was built in 1900 across the river at Lovers Leap, just beyond the city limits. The dam is 42 feet high and 732 feet wide, giving a head of 40 feet. The North Highlands plant has an installed capacity of 9,300 horsepower. An auxiliary steam plant of 3,000 horsepower is also in use. In addition to the hydroelectric development at this point, 1,300 horsepower in water is used by the Bibb Manufacturing Company as direct drive to the mill on the bluff over the power station. The street railway service and retail light and power business conducted by the Columbus Railroad Company is supplied by the Columbus Power Company as well as a number of large and important manufacturing industries and nine large cotton mills. The textile mills of Columbus have 251,000 spindles and the necessary complement of looms and use approximately 9,000 horsepower; the street railway system requires approximately 2,000 horsepower.

The Columbus Power Company is extending its sphere of operations by the erection of another dam at Goat Rock, from which point electric power will be distributed to adjacent cities and ultimately to West Point. The contractor now engaged in building the new dam operates all of his machinery with about 700 electric horsepower, a unique instance of the power of a river being utilized to harness itself. The development under construction at Goat Rock will be capable of generating 24,000 primary horsepower and 16,000 secondary horsepower. The head at this dam will be 73 feet.

There are also two other dams across the Chattahoochee River at Columbus that were built in 1853 and are still doing good service. These are the Eagle and Phenix Dam and the City Mills Dam, having effective heads of 27 and 9 feet, respectively. The development at the Eagle and Phenix Mills is used both as a direct water drive and for generating electric power, which is partially transmitted to other mills across the river in Alabama. The installed capacity is 6,000 horsepower. The City Mills Company utilizes 600 horsepower direct water drive to operate its gristmills, and in addition has an installed hydroelectric development of 1,000 horsepower.

The West Point Manufacturing Company at West Point, Ga., has established a hydroelectric development of about 3,000 horsepower, which is used to operate two cotton mills of about 20,000 spindles each.

A water-power development of considerable importance on the Chattahooche River is the plant of the Atlanta Water and Electric Power Company, which is located at Morgan Falls (Bull Sluice), about 5 miles below Roswell. The dam is a massive concrete structure 48 feet high and 900 feet long. The power house is equipped with seven 1,500-kilowatt generators and the power is transmitted to Atlanta, where it is utilized by the Georgia Railway and Electric Company to operate the street cars.

Three miles north of the city of Gainesville is located the plant of the North Georgia Electric Company, built in 1901. There is a small development on the Chestatee River, 8 miles north of the main one. At the main power house four 550-kilowatt generators are used and at the smaller plant two 450-kilowatt generators. This plant supplies power and light to Gainesville, Norcross, Buford, and smaller places and transmits 3,000 horsepower to Atlanta, a distance of 50 miles.

Incidentally it may be mentioned that extensive use of the waters of the upper tributaries of the Chattahoochee River is made in mining operations. The following description is taken from the Twentieth Annual Report of the United States Geological Survey, Part IV, page 173:

> This river drains a large area of the Dahlonega gold belt in the northeastern part of the State, in which hydraulic mining of the saprolite ores is an important industry. These veins or belts of auriferous decomposed schists vary in thickness from 50 to 150 feet, and are decomposed to the level of the adjacent large streams, giving a breast or heading in the open cut of from 100 to 150 feet in depth above sluice grade. The mining is done by hydraulic giant or nozzle under pressure from reservoirs on the hilltop, in the same manner that the great gravel deposits of the Pacific slope are worked. * * * The supply for these mining operations is taken from the mountain streams at high level and brought by gravity in deep, narrow, swiftly running ditches or canals along the hillsides, and finally on the hilltops over the mines, at which point it has an elevation of from 200 to 300 feet above the streams. * * * These canals vary in length from 6 to 25 miles.

THE FLINT RIVER.

The Flint River rises about 12 miles southwest of Atlanta, takes a southerly course, and joins the Chattahoochee to form the Apalachicola River at the southwestern corner of the State. The length of the river is about 230 miles and its drainage area about 8,420 square miles. The river crosses the "fall line" near Knoxville, Ga., on a direct line between Macon and Columbus. Above the fall line the river is swift and has numerous shoals. Between Montezuma and Albany, a distance of 70 miles, the fall is 125 feet. The river has several tributaries with unimproved power sites, among which may be mentioned Kinahatoochee Creek, 2 miles north of Albany, with power enough for 100,000 spindles.

(To be continued.)

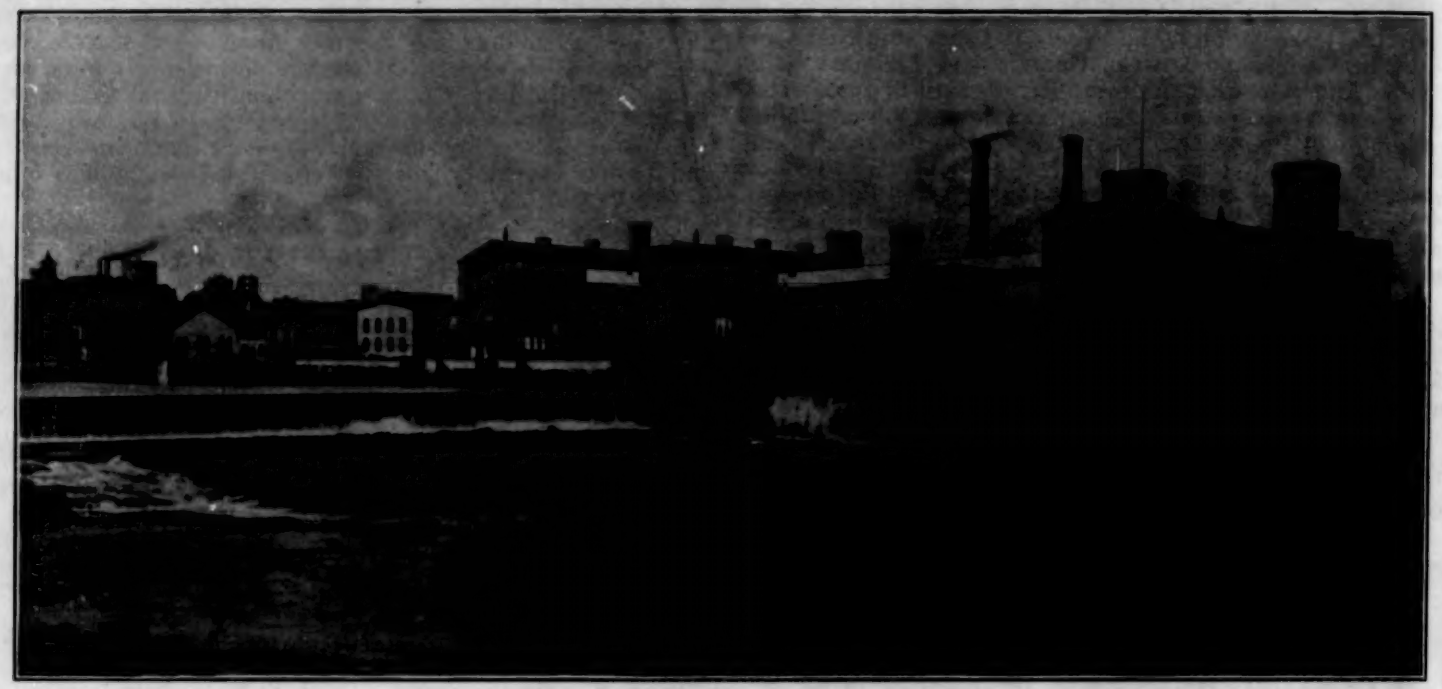


FIG. 2.—Eagle and Phoenix Dams and Mills, Columbus, Ga.

TABLE 1.—*Climatological data for November, 1910. District No. 2, South Atlantic and east Gulf States.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Virginia.																				
Arvonia	Buckingham	350	6	41.6	− 4.6	68	10	19	21	36	0.96	− 1.36	0.64	0.0	3	15	11	4	n.	Rev. P. F. Jones.
Ashland	Hanover	221	19	42.2	− 5.1	68	10	22	21	31	1.44	− 1.12	0.50	T.	4	11	16	3	n.	E. L. C. Scott.
Buchanan	Botetourt	820	6								0.41		0.20	0.0	3					D. D. Booze.
Callaville	Brunswick	250	16																	F. M. Gage.
Cape Henry	Princess Anne	20	36	45.9	− 6.2	72	10	31	30	26	0.46	− 1.77	0.44	0.0	9	17	7	6	nw.	U. S. Weather Bureau.
Charlottesville	Albemarle	800	21	42.8	− 4.8	67	1	25	20	30	1.64	− 0.93	0.64	T.	7	11	7	12	n.	Leander McCormick.
Clarksville	Mecklenburg		16								1.05		0.80	0.0	3					J. Henry Ligon.
Columbia	Fluvanna	246	12	41.0	− 5.7	68	10	19	21	35	1.17	− 0.93	0.82	0.0	2	11	9	10	nw.	Chesapeake & Ohio R. R.
Danville	Pittsylvania	413	10								1.02		0.82	0.0	3					C. G. Watkins.
Diamond Springs	Princess Anne	20		44.5		72	10	26	14†	34	1.68		0.32	0.0	9	21	2	7		Virginia Experiment Sta.
Hampton	Elizabeth City	5	27	45.4	− 5.4	69	10	31	17†	23	1.18	− 1.46	0.49	T.	5	18	6	6	nw.	Hampton Institute.
Hot Springs	Bath	2,195	18	35.0	− 6.2	63	9	16	23	40	1.35	− 0.81	0.40	T.	7	16	9	5		James P. Scott.
Ivor	Southampton	87	1	43.8		72	2†	18	30	36	1.45		0.70	0.0	3					N. & W. Ry., Exp. Farm.
Lassiter	Goochland	100									2.38		1.10	0.0	3	22	5	3		T. J. Davis.
Lexington	Rockbridge	1,060	33	37.8	− 5.7	68	1	16	21	43	0.56	− 2.21	0.39	T.	6	12	6	12		Virginia Military Institute.
Lynchburg	Campbell	685	39	42.4	− 3.6	64	1	23	21	35	0.87	− 1.92	0.48	T.	5	8	11	11	nw.	U. S. Weather Bureau.
New Castle	Craig	1,300	1								1.16		1.05	0.0	3					Miss J. L. Martin.
Newport News	Warwick	55	7	46.8		72	2	31	18‡	29	1.36		0.54	0.2	7	10	13	7	nw.	Ernest W. Sniffen.
Norfolk	Norfolk	91	40	45.4	− 5.5	71	10	30	30	24	1.02	− 1.64	0.33	0.0	8	16	6	8	nw.	U. S. Weather Bureau.
Petersburg	Dinwiddie	60	23	43.8*	− 5.0	71	10	22	21	33	0.97	− 1.48	0.72	0.0	2				n.	Central State Hospital.
Randolph	Charlotte	334	6								1.48		1.06	0.0	3					W. B. Spencer.
Richmond	Henrico	144	31	42.4	− 6.4	70	10	24	21	31	0.98	− 1.41	0.65	0.0	6	8	11	11	nw.	U. S. Weather Bureau.
Rocky Mount	Franklin	1,150	16	41.5	− 7.4	65	1†	19	21†	41	0.67	− 2.19	0.28	0.0	4					G. W. B. Hale.
Saxe	Charlotte	350	7	42.5		68	8†	19	17	45	1.70		1.08	0.0	3	24	1	5	nw.	State Experiment Farm.
Spottsville (near)	Surey	15	22	44.0	− 4.6	72	10	21	17†	37	1.14	− 1.80	0.50	0.0	8	20	3	7	sw.	B. W. Jones.
Williamsburg	James City	70	19	43.2	− 4.9	72	10	23	21	33	1.40	− 1.09	0.65	0.0	4	16	6	8	nw.	Eastern State Hospital.
North Carolina.																				
Beaufort	Carteret	10	8	51.4		72	2	36	13†	27	0.87		0.34	0.0	3	18	7	5	nw.	H. D. Aller.
Belhaven	Beaufort	4	1	46.8		74	10	26	14†	39	0.48		0.26	0.0	2	23	1	6	w.	W. S. Hopkins.
Brewers	Wilkes	1,950	13																	W. L. Brewer.
Caroleen	Rutherford	806	10	45.8	− 4.2	75	14	23	13	45	0.24	− 2.34	0.12	0.0	3	20	9	1	sw.	S. B. Tanner.
Chalybeate Springs	Harnett	500	4	45.4		74	2†	19	17	42	0.56		0.45	0.0	3	23	4	3	nw.	J. A. Smith.
Chapel Hill	Orange	500	52	46.0	− 3.9	73	10	24	17†	40	2.48	− 0.30	2.00	0.0	3	18	11	1	sw.	Prof. A. H. Patterson.
Charlotte	Mecklenburg	773	34	48.0	− 2.4	74	14	28	13	33	0.36	− 2.50	0.27	0.0	4	16	10	4	nw.	U. S. Weather Bureau.
Chimney Rock	Rutherford	1,150		47.5		74	14	25	17	43	0.40		0.40	0.0	2	25	4	1	w.	J. M. Flack.
Clinton	Sampson	156	3																	W. T. Boyette.
Durham (near)	Durham	406	1								0.95		0.40	0.0	4					Supt. Durham Water Co.
Eagletown	Northampton	66	5	44.2		72	10	25	17	34	1.06		0.47	0.0	5	20	6	4	nw.	J. T. Elliott.
Edenton	Chowan	30	16	45.2	− 6.4	71	10	27	30	35	1.00	− 1.85	0.40	0.0	3	20	4	6	nw.	E. R. Conger.
Enfield (near)	Halifax	99									0.68		0.41	0.0	4					T. S. Inborden.
Fayetteville	Cumberland	170	23	49.4	− 2.4	75	2†	26	17	42	0.79	− 2.02	0.59	0.0	3					Frank Glover.
Goldsboro	Wayne	102	40	45.6	− 5.6	72	10	25	17	41	0.03	− 2.27	0.02	0.0	2				w.	Mrs. N. B. Taylor.
Graham	Alamance	656	8								0.69		0.53	0.0	3					Dr. W. R. Goley.
Greensboro	Guilford	843	29	45.4	− 3.2	72	10†	22	17†	40	0.90	− 1.77	0.60	0.0	4				ne.	A. R. Horry.
Greenville	Pitt	75	17								0.37	− 2.30	0.16	0.0	7					R. M. Hearne.
Hatteras	Dare	11	36	51.3	− 5.4	71	10	38	30	24	0.38	− 4.29	0.19	0.0	4	18	6	6	nw.	U. S. Weather Bureau.
Henderson	Vance	508	17	43.4	− 6.1	68	10	25	21	29	1.25	− 1.50	0.75	0.0	3	19	10	1	nw.	Enoch Powell.
Kinston	Lenoir	46	12	48.0	− 3.1	76	10	23	17	40	0.26	− 2.07	0.19	0.0	2	21	4	5	n.	H. C. V. Peebles.
Lenoir	Caldwell	1,186	37	42.9	− 3.1	68	9	17	21	43	0.30	− 2.79	0.15	0.0	2	28	1	1	n.	G. M. Goforth.
Lexington	Davidson	810	9																	H. R. Berrier.
Lincolnton	Lincoln	904	5	43.8		75	14	21	21†	45	0.15		0.15	0.0	1	21	7	2	nw.	S. P. Houser.
Louisburg	Franklin	375	19	44.1	− 4.3	70	10	24	21	33	0.89	− 1.59	0.47	0.0	3	24	3	3	n.	T. B. Wilder.
Lumberton	Robeson	102	27	48.6	− 3.6	77	2	24	13	47	0.72	− 1.50	0.35	0.0	4				nw.	B. M. Bavis.
Manteo	Dare	12	5	48.2		71	2†	30	17	32	0.54		0.32	0.0	3	23	2	5	nw.	U. S. Weather Bureau
Marion	McDowell	1,425	18	7.8	− 3.1	77	2	21	13†	44	0.20	− 2.87	0.14	0.0	3	18	11	1	nw.	Sgt. Thomas McGuire.
Moncure	Chatham	145	16	44.6	− 5.6	74	10	22	21	42	0.68	− 1.91	0.36	0.0	4	21	0	9	nw.	B. J. Utley.
Monroe	Union	586	16	47.0	− 3.1	76	14	21	13	48	0.36	− 2.54	0.20	0.0	2	25	1	4	nw.	T. A. Ashcraft.
Morganton	Burke	1,135	23	44.8	− 3.3	68	9	20	21	40	0.21	− 2.50	0.11	0.0	2	25	3	2	nw.	H. D. Judd.
Mt. Airy	Surry	1,048	22	44.0	− 2.4	67	1	20	22	40	1.02	− 1.61	0.34	0.0	5	21	2	7	nw.	Prof. A. H. Merritt.
Mt. Holly	Gaston	616	13								0.54	− 2.11	0.42	0.0	2					J. W. Holland.
Nashville	Nash	190	6	44.7		75	2	24	21	40	1.26		0.66	0.0	5	15	7	8	n.	J. B. Boddie.
Newbern	Craven	12	28	48.0	− 6.1	75	8†	24	17	44	0.49	− 2.44	0.26	0.0	2				nw.	J. B. Hill.
Pinehurst	Moore	650	6	49.0		74	2	28	7†	38	0.37		0.37	0.0	1	23	5	2	n.	General Office.
Pittsboro	Chatham	480	19																	B. M. Poe.
Raleigh	Wake	360	39	46.2	− 4.0	72	10	29	21	30	0.69	− 1.66	0.40	0.0	4	20	5	5	nw.	U. S. Weather Bureau.
Ramseur	Randolph	442	3	43.6		75	8	18	17	53	0.56		0.40	T.	2	25	5	0	n.	A. H. York.
Randleman	do	810	5								0.87		0.49	0.0	5					J. R. Walton.
Reidsville	Rockingham	828	11	44.9	− 2.8	75	10	24	17	37	1.09	− 1.48	0.74	0.0	3	18	2	10	nw.	E. M. Redd.
Rock House	Macon	3,100	18	43.0	− 3.6	64	14†	18	12	33	0.83	− 3.96	0.65	T.	4	17	13	0	nw.	B. C. Hawkins.
Rockingham	Richmond	210	15	46.4	− 5.4	76	14	23	12	49	0.61	− 1.95	0.45	0.0	3					H. S. Ledbetter.
Rocky Mount	Nash	105									1.05		0.40	0.0	5					W. H. Calcutt.
Roxboro	Person	600	12	44.2	− 4.9	69	10	23	30	33	1.22	− 1.39	0.80	0.0	3	20	1	9	nw.	N. Lunsford.
Salem	Forsythe	1,000	15	42.9	− 5.1	67	8	21	17	38	0.68	− 1.88	0.51	0.0	2					Rev. H. E. Rondthaler.
Salisbury	Rowan	760	26	46.4	− 4.1	74	1†	23	30	43	0.68	− 1.95	0.52	0.0	3	21	2	7	n.	Miss Thelma Wilkinson.
Saxon	Stokes	900	18	41.6	− 5.3	68	1†	20	21	40	0.60	− 2.05	0.44	0.0	2	18	6	6	nw.	R. P. McAnnaly.
Scotland Neck	Halifax	80	6	43.6		70	10	24	17	35	0.74		0.40	0.0	5	12	11	7	w.	J. Y. Savage.
Selma	Johnston	225	20	45.4	− 5.4	75	10	24	17	37	0.85	− 1.84	0.40	0.0	3					Dr. R. J. Noble.
Settle	Iredell	700	14	44.2	− 4.5	71	8	20	17†	40	0.28	− 2.45	0.20	0.0	2	18	5	7	sw.	C. H. Smith.
Sloan	Dupiln	50	17	48.9	− 4.0	75	2	23	30	42	0.49	− 2.33	0.22	0.0	3	21	5	4	nw.	D. M. Sholar.
Snow Hill	Greene	80	5	46.6*		75	2†	23	17	42*	0.27		0.15	0.0	2	18	7	5	n.	L. J. H. Mewborn.
Southern Pines	Moore	519	20	49.0	− 4.0	73	2	29	16†	40	0.48	− 2.27	0.46	0.0	1	21	5	4	ne.	Mrs. P. H. Beck.
Southport	Brunswick	18	55	50.8	− 5.9	74	25	30	12†	30	1.81	− 0.97	0.87	0.0	5	18	9	3	nw.	Mrs. C. E. Taylor.
Statesville	Iredell	950	22	44.8	− 2.0	71	9	21	21	42	0.34	− 2.58	0.12	0.0	3	13	7	10	nw.	D. M. Thompson.
Tarboro	Edgecombe	50	25	46.2	− 4.9	75	2†	26	14†	41	0.95	− 1.67	0.32	0.0	5	22	2	6	nw.	E. V. Zoeller.
Troy	Montgomery	800	1																	Mrs. O. B. Deaton.
Weldon	Halifax	81	38	44.2	− 4.3	74	10	24	21	43	1.00	− 1.45	0.34	0.0	6				w.	H. S. S. Cooper.
Whiteville	Columbus	59	5	47.2		76	2	22	7	48	1.27		0.54	0.0	3	27	0	3	nw.	Rev. C. C. Smith.
Willard	Pender	51	2	48.2		75	10	23	17	40	0.61		0.34	0.0	2	21	6	3	n.	J. H. Jefferies.
Wilmington	New Hanover	52	39	50.5	− 3.6	73	2	32	13	32	0.92	− 1.53	0.42	0.0	5	17	8	5	nw.	U. S. Weather Bureau.
Yanceyville	Caswell	600																		A. Y. Kerr.
South Carolina.																				
Aiken	Aiken	565	26	52.3	− 2.3	76	3	30	13	33	0.70	− 1.80	0.70	0.0	1	25	0	5	w.	Dr. Huger T. Hall.
Allendale	Barnwell	186	22	51.6	− 4.0	78	2	30	1†	46	2.57	+ 0.70	0.59	0.0	6	17	8	5		A. R. Hiers.
Anderson	Anderson	764	9	50.2	− 1.3	76	14	27	13	37	0.18	− 2.60	0.14	0.0	2	19	1	10	w.	H. H. Russell.
Batesburg	Lexington	656	22	51.3	− 3.1	75	14†	31	30	33	0.62	− 1.84	0.35	0.0	2	27	1	2	e.	E. J. Hite.
Blackville	Barnwell	296	22	53.1	− 2.6	79	8†	26	30	40	1.82	− 0.19	0.62	0.0	9	21	5	4	nw.	Miss M. E. Lange.
Blairs	Fairfield	293	6								0.03		0.03	0.0	1	17	6	7	n.	John R. Ragsdale.
Bowman	Orangeburg	100	9	53.8		78	14†	25	13	44	2.29		1.47	0.0	3	26	3	1	w.	B. O. Evans.

TABLE 1.—*Climatological data for November, 1910. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
South Carolina—Contd.																			
Calhoun Falls	Abbeville	508	17	.....	.....	.....	.....	.....	.....	.....	0.35	− 2.19	0.35	0.0	1	25	4	1	sw.	M. L. Crisp.
Camden	Kershaw	222	44	.....	.....	.....	.....	.....	.....	.....	0.62	− 1.55	0.20	0.0	5	20	2	2	nw.	W. C. Brown.
Catawba	York	562	5	.....	.....	.....	.....	.....	.....	.....	0.44	.....	0.20	0.0	3	20	2	8	n.	Jas. C. Faris.
Chappells	Newberry	402	5	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	23	5	2	w.	W. R. Zimmerman.
Charleston	Charleston	48	40	54.6	− 3.5	76	25	37	30	26	1.61	− 1.26	0.64	0.0	6	18	9	3	w.	U. S. Weather Bureau.
Cheraw	Chesterfield	144	22	49.3	− 3.1	77	14	26	17	46	0.61	− 1.54	0.32	0.0	3	20	5	5	nw.	J. H. Powe.
Clemson College	Oconee	850	19	47.2	− 3.9	71	15	25	13	38	0.33	− 2.47	0.33	0.0	1	25	3	2	w.	Prof. John N. Hook.
Columbia	Richland	351	23	51.6	− 2.2	77	14	30	13	33	0.59	− 1.68	0.29	0.0	6	18	8	4	w.	U. S. Weather Bureau.
Conway	Horry	25	18	50.6	− 3.8	75	2	27	13	40	2.31	+ 0.01	1.30	0.0	6	20	1	9	sw.	P. C. Quattlebaum.
Darlington	Darlington	175	15	50.0	.....	77	14	24	13	46	0.76	− 1.66	0.28	0.0	4	24	0	3	.....	D. C. McCall.
Dillon	Dillon	100	6	50.6	− 2.9	77	2†	24	13	43	1.25	− 0.94	0.57	0.0	4	.....	.....	.....	.....	A. E. Rowell.
Effingham	Florence	106	18	.....	.....	.....	.....	.....	.....	.....	0.45	− 1.99	0.25	0.0	2	25	0	5	w.	H. B. McCall.
Ferguson	Berkeley	51	2	.....	.....	.....	.....	.....	.....	.....	0.74	.....	0.46	0.0	3	25	0	5	n.	Pierre Gaillard.
Florence	Florence	136	22	52.8	− 1.1	85	9	28	13	48	0.80	− 1.51	0.40	0.0	4	22	2	6	sw.	H. K. Gilbert.
Georgetown	Georgetown	12	17	53.2	− 6.7	78	26	32	13	38	2.10	− 0.12	0.75	0.0	5	19	11	0	w.	A. P. Hazard.
Greenville	Greenville	989	18	50.0	+ 0.4	78	4†	27	12†	46	0.30	− 1.98	0.30	0.0	1	17	5	8	nw.	Mrs. S. A. Crittenden.
Greenwood	Greenwood	671	22	50.2	− 1.8	78	14	30	4†	45	0.40	− 2.38	0.22	0.0	2	24	1	5	w.	M. M. Calhoun.
Heath Spring	Lancaster	568	9	50.4	.....	78	10	25	17	43	0.56	.....	0.30	0.0	2	24	2	4	w.	J. A. Weaner.
Jacksonboro	Colleton	13	2	51.8	.....	75	25	30	13	36	2.62	.....	1.05	0.0	5	21	3	6	nw.	W. E. Haskell, jr.
Kingstree	Williamsburg	54	22	51.1	− 4.4	77	24†	29	5†	38	1.72	− 0.46	0.55	0.0	5	23	3	4	ne.	A. O. Matthews.
Liberty	Pickens	900	16	49.0	− 1.9	74	14	24	13	39	0.60	− 2.08	0.50	0.0	2	22	6	2	sw.	Jno. T. Boggs.
Little Mountain	Newberry	711	17	47.3	− 6.0	73	2	30	30	28	0.79	− 1.51	0.30	0.0	4	22	1	7	w.	Dr. J. M. Sease.
Meriwether	Edgefield	.....	1	50.8	.....	76	14	27	12†	42	1.21	.....	0.72	0.0	3	15	4	11	.....	W. S. Middleton.
Newberry	Newberry	502	6	50.4	− 3.3	78	14	27	13	38	0.59	− 2.34	0.30	0.0	6	17	10	3	w.	W. G. Peterson.
Pelzer	Anderson	873	5	.....	.....	.....	.....	.....	.....	.....	0.28	.....	0.28	0.0	1	19	4	7	w.	John M. Ward.
Pinopolis	Berkeley	55	17	.....	.....	.....	.....	.....	.....	.....	1.83	− 0.64	0.77	0.0	4	.....	.....	.....	.....	Miss E. P. Ravenel.
St. George	Dorchester	109	22	53.3	− 2.4	78	25	33	4†	33	2.01	+ 0.08	0.60	0.0	5	24	0	6	.....	G. F. Lewis.
St. Matthews	Calhoun	209	22	51.8	− 3.1	75	14	32	13	35	1.61	− 0.48	0.60	0.0	4	22	0	8	.....	J. S. Wannamaker.
Saluda	Saluda	530	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Alvin Etheridge.
Santuc	Union	512	15	49.3	− 2.2	77	14	26	16	42	0.14	− 2.64	0.09	0.0	2	18	9	3	w.	E. W. Jeter.
Smith Mills	Williamsburg	62	15	.....	.....	.....	.....	.....	.....	.....	1.25	− 1.24	0.42	0.0	5	25	0	5	n.	W. G. Walker.
Society Hill	Darlington	192	19	49.2	− 3.3	72	14	26	30	33	0.65	− 1.63	0.35	0.0	3	23	3	4	ne.	Maj. J. J. Lucas.
Spartanburg	Spartanburg	875	19	47.6	− 3.9	74	14	27	4†	39	0.20	− 2.58	0.18	0.0	2	19	0	11	.....	F. P. Robinson.
Summerville	Dorchester	75	13	53.2	− 2.8	77	14	29	13	38	2.17	− 0.38	0.68	0.0	5	10	18	2	sw.	Miss E. H. Gadsen.
Trenton	Edgefield	620	17	53.3	− 2.2	79	9	30	30	37	1.28	− 1.22	0.71	0.0	4	18	10	2	w.	C. A. Long.
Trial	Berkeley	85	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Etsell Gaillard.
Walterboro	Colleton	69	6	54.3[d]	.....	79	14†	28	13	44	2.63	.....	0.96	0.0	5	21	5	4	.....	J. A. Westerberg.
Winnsboro	Fairfield	545	21	51.2	− 2.5	77	14	30	13	33	0.48	− 1.70	0.40	0.0	2	25	4	1	nw.	John W. Seigler.
Winthrop College	York	690	11	49.6	− 2.9	75	14	27	12†	34	0.27	− 2.15	0.12	0.0	3	21	6	3	sw.	E. R. Rivers.
Yemassee	Hampton	23	15	51.2	− 3.9	75	14†	31	13	38	1.98	− 0.00	0.86	0.0	5	22	2	6	.....	J. G. Hutson.
Georgia.																				
Abbeville	Wilcox	.....	7	.....	.....	.....	.....	.....	.....	.....	3.35	.....	1.68	0.0	7	21	0	9	w.	W. H. Calhoun.
Adairsville	Bartow	772	18	47.5[d]	− 2.8	72	11	25	7	37[d]	0.51	− 2.46	0.33	0.0	3	21[a]	6[a]	2[a]	.....	Dr. J. P. Bowdoin.
Albany	Dougherty	230	25	55.6	− 2.1	82	14	32	7	44	3.56	+ 1.24	1.68	0.0	7	13	7	10	nw.	Geo. C. Brosnan.
Aliapaha	Berrien	293	21	56.4	− 1.2	80	14	33	8	37	3.74	+ 1.92	3.18	0.0	4	8	11	11	sw.	James T. Austin.
Americus	Sumter	362	27	52.8	− 3.8	76	14†	30	1	40[a]	3.05	+ 0.33	1.00	0.0	6	20	3	7	nw.	F. P. Harrold.
Athens	Clarke	694	33	51.4	.....	77	26	28	4	35	0.23	− 2.75	0.13	0.0	3	19	6	5	w.	C. D. Cox.
Atlanta	Fulton	1,218	45	49.7	− 2.0	73	24	27	4	28	0.57	− 2.86	0.20	0.0	5	15	2	13	w.	U. S. Weather Bureau.
Augusta	Richmond	180	44	52.0	− 2.3	76	14	31	13	33	1.35	− 1.38	0.58	0.0	7	15	10	5	w.	U. S. Weather Bureau.
Bainbridge	Decatur	119	18	56.9	− 1.3	82	25	31	4	43	2.88	+ 1.40	1.37	0.0	6	19	2	9	n.	Mrs. C. O. Wimberley.
Barnesville	Pike	875	2	52.4	.....	75	14†	28	4	32	1.63	.....	0.58	0.0	5	15	10	5	w.	Prof. T. O. Galloway.
Blakely	Early	300	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ralph M. Hobbs.
Butler	Taylor	650	8	.....	.....	.....	.....	.....	.....	.....	1.31	.....	0.33	0.0	6	23	0	7	nw.	Mrs. Mamie F. Wallace.
Camak	Warren	613	17	51.0	− 2.6	78	15	25	4	40	1.65	− 0.61	0.90	0.0	3	18	4	8	.....	J. A. Chapman.
Canton	Cherokee	894	17	.....	.....	.....	.....	.....	.....	.....	0.82	− 2.56	0.32	0.0	5	18	4	8	n.	G. W. Evans.
Carlton	Madison	557	11	.....	.....	.....	.....	.....	.....	.....	0.19	− 2.21	0.10	0.0	2	27	0	3	w.	M. C. Power.
Clayton	Rabun	2,100	17	45.2	− 3.1	71	14	23	7†	36	1.12	− 2.70	1.00	0.0	2	21	4	5	w.	A. J. Duncan.
Columbus	Muscogee	262	23	52.2	− 3.3	79	25	32	1	38	1.49	− 1.30	0.73	0.0	5	21	2	7	nw.	A. J. Land.
Covington	Newton	800	17	.....	.....	.....	.....	.....	.....	.....	0.98	− 1.92	0.25	0.0	5	21	7	2	nw.	Mrs. Sarah E. Cruse.
Cuthbert	Randolph	446	11	54.2[c]	− 3.0	78	25	26	30	38[c]	3.02	.....	1.30	0.0	4	15	9	6	.....	Prof. W. McMichael.
Dahlonega	Lumpkin	1,519	18	47.2	− 2.6	69	26	25	4	32	0.78	− 2.81	0.42	0.0	4	12	17	1	nw.	Prof. B. P. Gaillard.
Diamond	Gilmer	2,020	20	45.6	− 2.9	70	26	22	7†	41	1.22	− 2.81	0.94	0.0	5	15	7	8	.....	R. A. Kimzey.
Dublin	Laurens	452	16	.....	.....	.....	.....	.....	.....	.....	2.20	− 0.41	1.04	0.0	4	25	1	4	.....	Mrs. M. E. Martin.
Dudley	....do	.....	8	54.2	.....	80	14	31	1†	39	1.65	.....	1.06	0.0	5	17	10	3	nw.	J. H. M. O'Sullivan.
Eastman	Dodge	361	19	56.0[c]	− 1.6	81	14	33	4	33[c]	3.57	+ 1.72	1.90	0.0	5	13[d]	4[d]	9[d]	.....	Miss A. M. Bohannon.
Eatonton	Putnam	.....	7	47.4[b]	.....	77	14	26	4	36[b]	1.66	.....	0.70	0.0	4	.....	.....	.....	.....	Prof. W. C. Wright.
Elberton	Elbert	710	19	51.8	− 1.0	77	14	27	4	37	0.24	− 2.61	0.12	0.0	2	21	7	2	w.	H. A. Roebuck.
Experiment	Spalding	946	10	52.6	− 0.7	73	14†	30	4	32	1.30	− 1.19	0.50	0.0	5	17	7	6	.....	Martin V. Calvin.
Fort Gaines	Clay	166	23	53.8	− 2.3	80	14	29	4	42	2.54	− 0.11	0.85	0.0	4	16	2	12	nw.	Mrs. Eva T. Graham.
Gainesville	Hall	1,254	34	45.9	− 2.9	71	14	22	4	40	0.53	− 2.89	0.53	0.0	1	24	0	6	w.	W. C. Walker.
Gillsville	....do	1,052	20	49.7	− 3.2	73	26	27	4	33	0.20	− 2.53	0.12	0.0	2	16	11	3	w.	J. W. Casey.
Glennville	Tattnall	.....	5	53.5	.....	76	25	33	1	42	3.34	.....	.....	0.0	4	25	3	2	nw.	Wm. C. Barnard.
Gore	Chattooga	.....	12	47.0	− 2.1	73	8	23	7	43	0.75	− 2.74	0.64	0.0	3	16	5	9	n.	H. M. Ponder.
Greensboro	Greene	598	8	51.6	.....	77	14	25	4	41	1.24	.....	0.69	0.0	3	20	5	5	w.	R. L. Caldwell.
Griffin	Spalding	975	21	50.8	− 2.2	77	25	25	4	33	1.30	− 1.15	0.58	0.0	5	19	4	7	nw.	V. P. Enloe.
Harrison	Washington	245	12	51.2	− 3.7	77	14	28	4	34	1.77	− 1.00	1.34	0.0	6	25	1	4	nw.	A. W. J. Wood.
Hartwell	Hart	838	2	.....	.....	.....	.....	.....	.....	.....	0.12	.....	0.12	0.0	1	29	0	1	.....	Dr. W. I. Hailey.
Hawkinsville	Pulaski	235	15	52.8[c]	− 1.5	79	1†	28	4	44[c]	2.78	+ 0.31	1.20	0.0	4	21	7	2	nw.	R. H. Wood.
Helena	Telfair	260	3	55.1	.....	79	14†	31	1	45	2.84	.....	1.54	0.0	6	11	8	11	nw.	James D. Smith.
Lafayette	Walker	871	4	45.2	.....	69	23	22	7	38	1.37	.....	0.97	0.0	3	16	6	8	nw.	Ralph A. Snow.
Lisbon	Lincoln	.....	4	51.0	.....	79	27	25	4	43	0.33	.....	0.16	0.0	3	19	2	9	.....	B. J. DuBose.
Lost Mountain	Cobb	.....	10	48.9	− 3.1	74	24	24	7	28	0.58	− 2.51	0.48	T.	2	4	25	1	w.	A. N. Mayes.
Louisville	Jefferson	259	18	52.4	− 2.6	75	14	31	4	33	2.14	− 0.17	1.10	0.0	3	21	7	2	.....	J. C. Little.
Lumber City	Telfair	.....	2	.....	.....	.....	.....	.....	.....	.....	3.66	.....	1.98	0.0	6	8	4	18	s.	Walter A. Hilton.
Lumpkin	Stewart	650	17	56.8[c]	− 0.7	84[c]	14	30	4	43[c]	2.71	+ 0.21	1.70	0.0	3	15	12	3	sw.	A. W. Latimer.
Macon	Bibb	370	33	51.6	− 3.6	76	14	32	4	35	1.64	− 1.38	0.85	0.0	7	17	7	6	nw.	U. S. Weather Bureau.
Marshallville	Macon	500	18	53.2	− 3.4	79	14	28	1†	42[a]	2.13	− 0.84	1.50	0.0	6	14	6	10	e.	E. C. Bryan.
Mauzy	Colquitt	.....	12	57.8[d]	− 1.0	83[d]	25	34[d]	1†	41	3.76	+ 1.65	2.53	0.0	4	22[d]	2[d]	2[d]	.....	T. J. Hudson.
Milledgeville	Baldwin	276	22	50.8	− 2.7	74	2†	28	4	38	2.13	− 0.23	0.82	0.0	5	24	1	5	nw.	Prof. O. M. Cone.
Millen	Jenkins	158	23	53.9	− 1.3	83	14	27	13	49	1.80	− 0.24	0.90	0.0	4	22	0	8	nw.	M. G. McComb.
Montezuma	Macon	292	5	.....	.....	.....	.....	.....	.....	.....	3.48	.....	1.36	0.0	6	19	4	7	w.	R. E. Fokes.
Monticello	Jasper	800	14	52.4	− 2.6	77	24	27	4	34	1.91	− 0.87	0.81	0.0	8	25	0	5	.....	Miss Maude C. Penn.
Morgan	Calhoun	337	18	.....	.....	.....	.....	.....	.....	.....	2.38	− 0.63	0.90	0.0	5	21	7	2	nw.	W. J. Ragan.
Newnan	Coweta	959	22	52.2	.....	78	23	27	4	39	2.16	− 0.78	1.00	0.0	6	19	3	8	ne.	Mrs. I. J. Milner.
Norcross	Gwinnett	1,078	.....	.....	.....	.....	.....	.....	.....	.....	0.48	.....	0.32	0.0	6	19	6	5	.....	W. O. Medlock.
Point Peter	Oglethorpe	1,000	21	51.2	.....	77	14	26	4	36	0.28	− 2.65	0.16	0.0	2	21	7	2[c]	w.	C. M. Witcher.
Poulan	Worth	365	19	55.6	− 1.2	80	25†	30	4†	41	1.62	− 0.76	0.81	0.0	5	22	2	6	.....	Dr. J. F. Wilson.
Putnam	Marion	.....	11	52.0[c]	.....	78[c]	14	29	30	42[c]	2.60	− 0.01	1.30	0.0	3	15	11	4	w.	Mrs. J. M. Collum

TABLE 1.—*Climatological data for November, 1910. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Georgia—Continued.																				
Quitman	Brooks	173	26	57.9	− 1.2	84	2	33	4	42	2.76	+ 0.74	1.00	0.0	5	21	0	9	nw.	A. B. Jones.
Ramsey	Murray	1,363	17	49.0	− 2.9	69	9	25	4	32	1.19	− 2.04	0.75	0.0	6	18	6	6	n.	D. E. Humphreys.
Resaca	Gordon	657	17								0.92	− 2.38	0.68	0.0	2	23	3	4	n.	D. A. Norton.
Rome	Floyd	576	55	46.0		72	9	25	7	41	0.76	− 2.64	0.38	0.0	4	22	3	5	w.	W. M. Towers.
St. George	Charlton		4	57.6		79	25†	35	5†	36	1.79		0.90	0.0	4	23	4	3	nw.	A. N. Lund.
St. Marys	Camden	20	19																	David C. Sterling.
Savannah	Chatham	65	60	55.6	− 2.6	76	25	36	13	27	2.74	+ 0.58	1.55	0.0	8	21	4	5	w.	U. S. Weather Bureau.
Statesboro	Bulloch	253	10	54.8	− 2.6	77	14†	34	1†	40	2.45	+ 0.29	0.80	0.0	6	13	15	2		J. C. Cromley.
Talbotton	Talbot	750	17	52.2	− 2.3	80	25	29	30	40	1.83	− 1.41	0.93	0.0	5	19	4	7	nw.	Dr. E. L. Bardwell.
Tallapoosa	Haralson	1,150	18	47.8	− 4.0	76	24†	27	4	41	1.19	− 1.68	0.55	0.0	5	18	3	9	nw.	Elmer C. Bishop.
Thomasville	Thomas	273	27	56.0	− 3.2	79	14	34	7	40	5.27	+ 2.74	4.17	0.0	6	16	7	7	nw.	U. S. Weather Bureau.
Toccoa	Stephens	1,050	25	49.6	− 0.6	73	26	29	12†	37	0.50	− 2.70	0.50	0.0	1	25	0	5	w.	Mrs. Alice Starke.
Valdosta	Lowndes	219	5	57.6		87	2	30	1	51	2.97		0.85	0.0	6	17	1	12	w.	Miss Annie Twitty.
Valona	McIntosh	10	10			78[a]	25				3.20	+ 1.10	2.15	0.0	3	26	0	4	ne.	J. M. Atwood.
Washington	Wilkes	630	23	51.4	− 1.2	77	14	29	7†	36	1.04	− 1.83	0.48	0.0	4	22	4	4	ne.	Miss Ella B. Smith.
Waycross	Ware	131	21	56.0	− 3.6	80[a]	25	35	4†	43[a]	3.13	+ 1.62	1.25	0.0	6	24	1	5	nw.	Thomas Sasser.
Waynesboro	Burke	86	19	52.3	− 2.3	79	27	28	12†	44	2.64	+ 0.82	1.25	0.0	5	23	1	6	nw.	Mrs. H. W. Blount.
West Point	Troup	620	22					29	4		1.34	− 1.63	0.50	0.0	4	19	1	11	nw.	E. N. Dunn.
Woodbury	Meriwether	641	10	49.5[b]	− 2.6	75	15†	24	4	41[b]	1.51	− 1.10	0.60	0.0	3	18[d]	1[d]	7[d]		G. A. Wright.
Florida.																				
Apalachicola	Franklin	24	5	60.7[d]		82[d]	14†	38[d]	7	28	2.73		2.52	0.0	2					G. H. Whiteside.
Arcadia	De Soto	61	8	62.7		83	27	38	5†	38	0.58		0.26	0.0	5	25	5	0	w.	C. S. Bushnell.
Archer	Alachua	92	24	59.4	− 3.7	82	15	32	30	38	3.48	+ 1.33	2.00	0.0	3					R. B. Hodgson.
Avon Park	De Soto	150	11	63.9	− 4.3	86	27	37	30	40	0.31	− 1.52	0.13	0.0	4	22	4	4	nw.	O. R. Thacher.
Bartow	Polk	115	13	61.8	− 5.3	83	15†	35	5†	42	1.10	− 0.61	0.83	0.0	3	17	7	6	ne.	Wm. Hood.
Blountstown	Calhoun		2																	C. L. Hobbs.
Bonifay	Holmes	111	8	57.2		79	14†	31	7†	42	1.80		1.00	0.0	2	14	5	11	n.	Wm. Rush.
Brooksville	Hernando	126	17	62.4	− 3.5	83	26	38	30	40	2.50	+ 0.94	1.40	0.0	3	23	3	4	w.	C. C. Peck.
Carrabelle	Franklin	10	13								2.11	+ 0.09	1.54	0.0	3					J. J. Blomquist.
Cedar Keys	Levy	10	12	61.2	− 2.1	77	2	43	4†	26	1.40	− 0.99	0.90	0.0	3	25	1	4	nw.	J. B. Lutterloh.
Clermont	Lake	105	16	64.0	− 3.7	84	15†	43	5†	32	2.28	+ 1.13	1.20	0.0	3	20	7	3	n.	S. S. Fesler.
De Funiak Springs	Walton	193	14																	R. W. Storrs.
De Land	Volusia	27	13	59.0	− 5.7	79	15†	32	5	39	1.62		0.94	0.0	6	20	6	4	nw.	Dr. O. B. Webster.
Eustis	Lake	56	17	62.7	− 3.0	88	15	39	5	38	1.30	− 0.11	0.95	0.0	3	24	3	3	w.	C. T. Smith.
Federal Point	Putnam	5	17	60.4	− 3.6	80	10	42	6	35	2.47	+ 0.35	1.27	0.0	7	22	5	3	nw.	E. S. Hubbard.
Fenholloway	Taylor	75	3	58.6[d]		83	15	32	30	43	1.83		1.00	0.0	2					Miss E. Wiggiesworth.
Fernandina	Nassau	10	12	59.4	− 3.4	79	14†	40	7	30	1.13	− 1.43	0.60	0.0	5	22	5	3	ne.	W. B. C. Duryee.
Fort Meade	Polk	125	17	62.0	− 4.6	84	16†	32	30	43	1.23	− 0.14	0.94	0.0	2	23	3	4	nw.	G. L. Broderick.
Fort Myers	Lee	12	17	64.8	− 4.9	79	18	46	5	28	0.89	− 0.37	0.58	0.0	3	26	2	2	e.	Miss M. M. Gardner.
Fort Pierce	St. Lucie	6	18	65.8	− 3.4	82	27	42	30	31	1.08	− 2.50	0.60	0.0	3	25	1	4	n.	T. J. O'Brien.
Gainesville	Alachua	176	23	58.0	− 4.7	79	18	37	30	35	2.79	+ 0.98	1.30	0.0	5					J. P. H. Bell.
Grasmere	Orange	175	13	61.6	− 4.6	86	1	36	30	37	1.55		1.05	0.0	4	25	3	2		J. B. Escott.
Hilliard	Nassau	69	1	57.6		80	24	35	1	39	2.70		1.00	0.0	4	24	1	5		The Hilliard Co.
Homestead	Dade	5		66.6		84	9†	39	5	40	0.75		0.41	0.0	5	25	4	1	nw.	W. J. Krone.
Huntington	Putnam	56	12																	C. E. Walker.
Hypoluxo	Palm Beach	4	9																	G. A. Angevine.
Inverness	Citrus	43	8	58.6		79	18	34	5	37	1.98	+ 0.65	1.19	0.0	3	8	18	4	ne.	W. H. Miller.
Jacksonville	Duval	101	37	59.5	− 1.8	79	25	40	4	26	1.64	− 0.55	0.89	0.0	4	19	6	5	nw.	U. S. Weather Bureau.
Jasper	Hamilton	152	11																	G. W. Duncan.
Johnstown	Bradford	125	14	60.2	− 0.2	83	15	34	30	38	1.53	+ 0.11	0.56	0.0	3	25	3	2		A. M. C. Brasch.
Jupiter	Palm Beach	34	21	66.8	− 4.8	81	10	44	30	25	1.31	− 1.74	0.56	0.0	7	16	12	2	nw.	U. S. Weather Bureau.
Key West	Monroe	14	38	70.4	− 3.9	79	17	58	6	17	1.35	− 1.01	0.92	0.0	3	24	4	2	ne.	Do.
Kissimmee	Osceola	65	17	64.3	− 3.1	83	15	42	5†	32	0.63	− 1.25	0.46	0.0	2	11	15	4	sw.	J. A. Simpson.
Lake City	Columbia	210	20	58.9	− 2.8	82	25	34	30	41	1.22	− 1.51	0.97	0.0	2	20	3	7	n.	W. B. Knight.
Live Oak	Suwanee	109	8								2.05	− 0.23	0.70	0.0	5	24	0	6	e.	D. O. Henry.
Macclenny	Baker	125	13																	Griffing Bros. Co.
Madison	Madison	200	6	57.4		79	25	34	4	38	4.01	+ 2.38	1.28	0.0	7	14	5	11	nw.	E. J. Vann.
Malabar	Brevard	24	8	64.4		88	23	40	30	40	0.74		0.20	0.0	6					J. F. Farley.
Manatee	Manatee	8	17	61.6	− 5.5	79	3	38	5	34	2.15	+ 0.57	1.80	0.0	3					W. P. Fuller.
Marianna	Jackson	80	9	57.2		83	14†	30	7	40	2.43		1.48	0.0	5	18	4	8	nw.	W. J. Watson.
Merritts Island	Brevard	20	30	63.7	− 4.7	79	11†	46	5	27	0.67	− 1.58	0.45	0.0	3					F. Ulrich.
Miami	Dade	5	13	68.7	− 4.5	85	10	44	14	34	0.45	− 1.90	0.45	0.0	1	25	4	1		E. V. Blackman.
Miami (Subtropical)	do	5																		Edwars Simmonds.
Middleburg	Clay	10	8	57.6[a]		82	15	33	4†	46	1.50		1.20	0.0	2					G. A. Chalker.
Molino	Escambia	49	8	56.7		87	24	27	30	45	2.34		1.40	0.0	3	24	0	6	n.	W. H. Trimmer.
Monticello	Jefferson	207	4																	E. C. Potter.
Mount Pleasant	Gadsden	260	5	56.4		82	25	29	30	43	4.47		2.00	0.0	4	14	0	16		Miss Addie Grubb.
Newport	Wakulla		8	58.9		80	14†	30	29	43	2.62	− 0.88	1.40	0.0	3	23	2	5	nw.	J. M. Ladd.
New Smyrna	Volusia	9	21	62.0	− 4.1	85[a]	15	39	30	36	2.02	− 0.75	1.40	0.0	4					F. Nordman.
Ocala	Marion	98	22	58.6	− 5.7	85	17	36	5†	43	2.79	+ 1.24	2.10	0.0	3	19	7	4		Dr. F. T. Schreiber.
Orange City	Volusia	39	19	61.2	− 3.6	89	15	31	5	47	0.63	− 1.10	0.24	0.0	3	23	3	4	w.	J. D. Graham.
Orlando	Orange	111	17	62.6	− 4.0	82	27	37	5	36	2.80	+ 1.41	1.51	0.0	4	17	8	5	nw.	Jas. Thompson.
Pensacola	Escambia	149	31	59.3	− 0.3	76	25	37	7	26	2.15	− 1.59	1.24	0.0	7	14	11	5	n.	U. S. Weather Bureau.
Plant City	Hillsboro	121	17	61.8[d]	− 4.7	80	11	38	30	33	0.95	− 0.41	0.95	0.0	1					E. B. Trask.
Rockledge	Brevard	28	1	64.0		81	16	42	30	29	0.65		0.45	0.0	2	25	3	2	nw.	Rev. J. H. White.
Rockwell	Marion	10	10	60.0[d]		80	18	37	7†	36	2.60	+ 1.04	2.00	0.0	3				sw.	Dunellon Phos. Co.
St. Andrew	Washington	14	14			76	25†				4.57	+ 1.53	1.32	0.0	5	27	3	0	w.	W. A. Emmons.
St. Augustine	St. Johns	10	59	60.2	− 3.9	80	18†	40	30	31	3.73	+ 1.45	1.45	0.0	5	25	2	3	nw.	J. R. Palmer.
Sand Key	Monroe		6																	U. S. Weather Bureau.
St. Leo	Pasco	140	14	61.7	− 4.7	79	18	40	5	32	2.54	− 0.99	1.42	0.0	4	21	5	4	w.	G. Schneider.
Satsuma Heights	Putnam	98	1	57.5		79	18	36	30	34	3.29		2.14	0.0	3	22	4	4	n.	The Satsuma Co.
Switzerland	St. Johns	10	13	58.8[b]	− 3.3	79	15†	38	5	35	1.73	− 0.46	0.80	0.0	3					W. C. Steele.
Tallahassee	Leon	192	24	57.4	− 2.1	77	14†	37	4†	35	4.75	+ 2.30	1.75	0.0	6	19	4	7	n.	W. H. Markham.
Tampa	Hillsboro	79	19	63.4	− 2.0	79	2	40	30	27	1.94	+ 0.22	1.72	0.0	3	18	7	5	nw.	U. S. Weather Bureau.
Tarpon Springs	do	20	16	61.6	− 4.0	81	27	38	5	34	1.79	+ 0.08	1.28	0.0						A. P. Albaugh.
Titusville	Brevard	6	17	64.0	− 2.0	87	3	40	30	39	1.58	− 0.97	0.62	0.0		17	8	5	n.	F. M. Taylor.
Wausau	Washington	250	12																	Curtis Jones.
Alabama.																				
Alaga	Houston	105	5								1.60		0.82	0.0		18	3	9	n.	James L. Willis.
Anniston	Calhoun	741	19	48.7	− 3.2	76	24	26	4	36	1.34	− 2.06	0.64	T.	5	14	4	12	n.	U. S. Weather Bureau.
Ashville	St. Clair	685	17	48.6	− 3.2	76	24†	24	4	38	1.41	− 1.23	0.74	0.0	4	18	3	9	nw.	George R. Cather.
Auburn	Lee	732	28	53.4	− 1.4	78	25	30	4	34	1.52	− 2.17	0.45	0.0	11	12	9	9	nw.	Dr. James T. Anderson.
Benton	Lowndes	149	9								3.26		1.54	0.0	4	15	7	8	nw.	S. T. Pruitt.
Bermuda	Conecuh		23	54.5[b]	− 2.1	80[b]	24	30[b]	4†	37[b]	3.50	+ 0.54	1.36	0.0	5	16	6	8	nw.	M. J. Morris.
Birmingham	Jefferson	700	22	51.0	− 3.1	75	24	28	4	32	1.46	− 1.93	0.78	0.0	6	12	9	9	nw.	U. S. Weather Bureau.
Calera	Shelby	500	9								1.04		0.50	0.0	5	20	2	8	e.	L. G. Privett.
Camp Hill	Tallapoosa	738	9	51.1		77	25	26	4	39	1.05		0.65	0.0	4	16	8	6	w.	Dr. Lyman Ward.
Cedar Bluff	Cherokee	594	6								0.44		0.40	0.0	2	16	14	0		Joe L. Daniel.

TABLE 1.—*Climatological data for November, 1910. District No. 2*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Alabama—Continued.																				
Citronelle	Mobile	331	22	58.3	− 1.6	81	14	35	30	34	2.07	− 0.84	0.75	0.0	7	19	4	7	n.	George A. Maloney.
Clanton	Chilton	590	17	51.8	− 2.6	77	25	29	7	38	2.09	− 0.77	0.95	0.0	9	12	2	16	n.	Wallace C. Edler.
Cochrane	Pickens																			E. L. Rose.
Cordova	Walker	334	19	50.2	− 1.6	80	24	24	4	42	1.16	− 1.81	0.53	0.0	3	20	5	5	s.	Scott Maxwell.
Cullman	Cullman	802	2	48.0	.....	76	24	25	7	44	1.15	.....	0.32	T.	5	16	5	9	nw.	Eugene A. Grayot.
Dadeville	Tallapoosa	760	5								2.14	.....	0.68	0.0	5	15	5	10	w.	Dr. W. B. Fulton.
Daphne	Baldwin		19	57.0[d]	− 2.8	78	27	36	7†	30[d]	2.92	+ 0.35	1.40	0.0	5	19	9	2	nw.	John H. Young.
Demopolis	Marengo		18								2.38	+ 0.11	0.90	0.0	7	14	7	9	nw.	George E. Pegram.
Eufaula	Barbour	200	26	51.0	− 4.8	76	14	25	1	38	2.88	+ 0.09	0.80	0.0	6	16	8	6	n.	Dr. J. B. Whitlock.
Evergreen	Conecuh	285	26	55.9	− 0.6	83	3	29	28†	48	2.01	− 1.21	1.25	0.0	6	18	0	12	n.	Robert L. Whitcomb.
Flomaton	Escambia	91	18	57.8	+ 0.3	78	8†	30	29†	40	3.20	+ 0.02	1.24	0.0	5	15	12	3	n.	T. J. Farris.
Fort Deposit	Lowndes	520	26	52.2	− 3.7	76	14†	32	1†	38	3.54	+ 0.69	1.20	0.0	5	13	8	9	s.	J. F. Hattemer.
Gadsden	Etowah	621	26	49.9	− 1.9	79	24	28	13†	38	0.89	− 2.14	0.42	0.0	5	15	3	12	ne.	D. P. Goodhue.
Goodwater	Coosa	826	15	51.2	− 3.1	80	26	27	1†	43	1.62	− 1.39	0.62	0.0	3	18	0	12	s.	D. S. Brown.
Greensboro	Hale	220	31	52.8	− 2.7	76	14	32	29	34	2.36	− 1.15	0.97	0.0	8	16	1	13	n.	W. E. W. Yerby.
Greenville	Butler	444	9								3.22		1.34	0.0	4	23	0	7		E. M. Lewis.
Hamilton	Marion		14	50.3	− 2.9	76	24†	25	22	44	1.25	− 2.05	0.59	0.0	4	15	3	12	n.	Prof. H. O. Sargent.
Highland Home	Crenshaw		18	56.2	− 1.1	86	10	32	30	31	3.75	+ 0.67	1.40	0.0	6	18	4	8	nw.	Prof. Samuel Jordan.
Livingston	Sumter	160	26	50.2	− 3.8	77	27	30	4†	40	3.22	+ 0.37	1.37	0.0	5	18	0	12	e.	Robert L. King.
Lock No. 4	Talladega	510	13	49.8	− 2.5	76	24	27	4†	40	1.06	− 1.06	0.58	0.0	4	21	0	9	w.	U. S. Engineers.
Lucy	Houston		5																	A. L. Crosby.
Maple Grove	Cherokee		17	46.8	− 4.0	76	24	25	3†	40	1.24	− 1.87	0.79	0.0	6	11	16	3	nw.	Mrs. A. L. Awbrey.
Mentone	DeKalb	1,595	3								1.06	.....	0.88	0.0	2	18	2	10	nw.	E. Mason.
Milstead	Macon		7								2.14		0.80	0.0	6	18	4	8	ne.	Evie Oswalt.
Mobile	Mobile	57	38	58.8	+ 1.3	78	25	39	30	27	2.08	− 1.66	1.18	0.0	6	17	9	4	n.	U. S. Weather Bureau.
Montgomery	Montgomery	240	38	53.9	− 1.8	78	25	34	4	32	2.75	− 0.38	1.09	0.0	6	15	7	8	nw.	Do.
Newbern	Hale		17	53.5	− 2.3	78	27	29	4	42	2.62	+ 0.12	0.86	0.0	8	14	9	7	n.	Dr. J. Huggins.
Oneonta	Blount	857	16	44.6	− 6.2	70	24	21	4	35	1.44	− 1.29	0.60	T.	7	13	1	16	n.	Aquilla J. Ketchum.
Opelika	Lee	817	31	52.6	− 2.1	75	24†	32	4†	28	1.54	− 1.63	0.55	0.0	5	20	2	8	w.	A. H. Read, jr.
Ozark	Dale	400	8	57.4[b]	.....	78[c]	14	32	4	35[c]	2.20	.....	0.95	0.0	5	16	8	6	s.	Miss Lucy Sellers.
Prattville	Autauga	281	10																	Jos. B. Bell.
Pushmataha	Choctaw		19					31[b]	7		3.84	+ 1.03	1.25	0.0	4	16	6	8	s.	E. A. Carr.
Selma	Dallas	147	30	52.2	− 3.1	78	14†	29	4	40	2.60	− 0.48	0.90	0.0	6	11	5	14	w.	Charles F. Brislin.
Spring Hill	Mobile	312	6	57.6	.....	78	14	36	30	29	3.71	.....	2.75	0.0	4	10	15	5	n.	Spring Hill College.
Talladega	Talladega	554	20																	Dr. Charles S. Northen.
Tallassee	Elmore		19								2.02	− 0.84	1.01	0.0	6	10	2	18	nw.	P. A. Noble.
Thomasville	Clarke	385	19	51.6	− 4.2	77	14†	29	29†	42	4.92	+ 2.44	2.05	0.0	6	13	3	14	nw.	J. G. Forster.
Troy	Pike	581	2	55.6	.....	80	24	31	30	33	3.79	.....	1.09	0.0	9	14	9	7	w.	C. S. Tutwiler.
Tuscaloosa	Tuscaloosa	230	29	49.4	− 3.6	77	23	29	4†	39	0.72	− 2.26	0.46	0.0	9	18	1	11	se.	W. S. Wyman, jr.
Tuskegee	Macon		10	53.0	− 4.7	79	25	29	4	44	2.32	− 0.58	1.04	0.0	4	13	8	9	n.	Prof. George W. Carver.
Union Springs	Bullock	216	23	52.2	− 3.1	76	14	31	4	33	1.81	− 1.52	0.62	0.0	5	13	14	3	s.	P. L. Cowan.
Uniontown	Perry	273	24	54.3	− 1.7	78	14†	31	4	36	2.85	+ 0.05	0.99	0.0	7	15	7	8	nw.	F. D. Stevens.
Valley Head	DeKalb	1,031	25	46.7	− 2.3	73	24	21	4	43	1.23	− 1.99	0.61	0.0	3	15	12	3	n.	M. T. Floyd, M. D.
Wetumpka	Elmore	205	18	54.0	− 2.2	81	24	28	4	39	1.94	− 1.05	0.81	0.0	4	13	0	17	n.	U. S. Engineers.
Mississippi.																				
Aberdeen	Monroe	210	22	50.8	− 0.2	74	27	28[b]	7†	39[b]	1.28	− 1.77	0.38	0.0	5	17	2	11	n.	L. D. Godfrey, jr.
Agricultural College	Oktibbeha	424	20	53.0	− 1.0	75	14†	29	7†	38	1.93	− 1.04	1.10	0.0	5	11	12	7	n.	E. R. Lloyd.
Bay St. Louis	Hancock	28	17	58.7	− 1.4	82	10	35	30	31	0.95	− 2.00	0.30	0.0	7	14	9	7	sw.	Brother Stanislaus.
Biloxi	Harrison	24	19	58.8	− 1.0	78	2	37	7†	28	1.15	− 1.75	0.34	0.0	6	13	8	9	nw.	Miss M. Josie Pope.
Booneville	Prentiss	504	16	48.2	− 3.6	74	27	28	4†	32	0.74	− 3.03	0.54	0.0	4	20	7	3	n.	Dr. D. T. Price.
Brookhaven	Lincoln	500	22	55.0	− 1.6	83	14	30	30	42	4.24	+ 0.33	1.78	0.0	7	13	1	16	s.	W. J. Bee.
Columbia	Marion	110	6								4.00		2.40	0.0	7	15	1	14	n.	N. R. Drummond.
Columbus	Lowndes	191	22	50.2	− 3.3	78	14	26	4	46	1.68	− 2.73	0.92	0.0	5	14	3	13	se.	J. B. Love.
Crystal Springs	Copiah	468	18	54.8	− 1.8	81	14	32	29	40	3.53	+ 0.54	1.00	0.0	7	20	3	7		D. H. Miller.
Edinburg	Leake		2	51.8	.....	77	27	27	7†	42	1.86	.....	0.81	0.0	6	15	3	12	n.	J. Y. Blocker.
Enterprise	Clarke	248	5								4.32	.....	1.43	0.0	8	8	4	18	nw.	J. B. Thompson.
Fulton	Itawamba		1								1.89		1.04	0.0	6	14	2	14	n.	A. L. Summers.
Hattiesburg	Forest	189	17	55.2[b]	− 2.4	80	....	30	1	44[b]	1.98	− 1.13	1.50	0.0	3	10	4	16	n.	T. C. Spence.
Hazlehurst	Copiah	460	20	54.9	− 2.0	79	14†	32[c]	6	38	5.53	+ 2.47	1.60	0.0	6	12	4	14	s.	J. D. Granberry.
Hickory	Newton	326									3.64		1.52	0.0	6	16	2	12		A. C. Hailey.
Jackson	Hinds	280	23	55.6	+ 0.6	82	14	29	29	43	2.12	− 1.39	0.58	0.0	8	14	9	7	sw.	B. H. Klyce.
Lake	Scott	446	22	51.2	− 1.9	79	26	28	7†	39	2.57	− 0.17	0.94	0.0	7	11	6	13	nw.	Mrs. Eddie McNeel.
Lake Como	Jasper		7																	C. Thigpen.
Laurel	Jones	241	6	55.3	.....	80	14	31	7†	40	5.57	.....	1.70	0.0	9	14	9	7	sw.	Thomas W. Flynt.
Leakesville	Greene		16	57.0	− 1.3	83	14	30[b]	7	46	3.46	+ 0.45	1.21	0.0	6	20	4	6		Dr. Sam Pool.
Louisville	Winston	561	21	54.0	− 0.4	78	25	29	7	40	1.03	− 1.87	0.38	0.0	4					B. T. Webster.
McNeill	Pearl River	230	7	58.3	.....	82	10	32	29	35	1.87	.....	0.45	0.0	6	12[b]	13[b]	3[b]	se.	Prof. E. B. Ferris.
Macon	Noxubee	185	22	50.4	− 3.8	76	22†	27	4	43[c]	0.73	− 1.67	0.29	0.0	4	14[b]	4[b]	10[b]	se.	Finis E. Carleton.
Magnolia	Pike	415	14	57.8	− 0.4	80	13†	30	29	37	3.21	+ 0.24	1.37	0.0	5	8	10	12	s.	Miss Ruby V. Roberts.
Meridian	Lauderdale	375	20	52.6	− 0.6	77	27	31	4	35	2.81	− 1.33	1.09	0.0	8	12	4	14	sw.	U. S. Weather Bureau.
Merrill	Greene	76	5								2.64		1.56	0.0	6	15	3	12	n.	L. C. Helms.
Monticello	Lawrence	209	3	54.6	.....	82[b]	14	27	29	49[b]	4.44	.....	1.80	0.0	9	7	12	11	ne.	Dr. G. A. Teunisson.
Okolona	Chickasaw	311	22	49.8	− 2.2	74	22	28	30	37	0.73	− 2.27	0.23	0.0	5	14	7	9	n.	D. H. Shell.
Pascagoula	Jackson	15	1	58.8	.....	78	2†	36	7	31	1.52	.....	0.70	0.0	6	16	10	4		Frederick Hess.
Pearlington	Hancock	10	22	57.8	− 1.4	80	14	31	29	34	0.82	− 2.34	0.30	0.0	4	12	11	7	ne.	Miss Annette Koch.
Porterville	Kemper		5	53.2	.....	80	14	27	5	45	2.30	.....	1.15	0.0	5	14	5	11	s.	I. S. Rea.
Shubuta	Clarke	197	5								4.00		1.40	0.0	9	14	2	14	n.	Geo. A. Floyd.
Waynesboro	Wayne	191	23	53.0	− 2.1	79	27	28	4	43	3.65	+ 0.79	1.40	0.0	5	12	1	17	n.	R. S. Burke.
Woodland	Chickasaw		1								1.36	.....	0.83	0.0	6					Tallahatchie Drain. Com.
Louisiana.																				
Pearl River	St. Tammany		5								1.62	.....	0.44	0.0	9	14	9	7	n.	Geo. F. Bancks.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
‖ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
| Estimated by observer.
|| Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 2, South Atlantic and east Gulf States.*

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Virginia.																																
Arvonia	James		T.	.64							T.				.06										.24			T.	.26			0.96
Ashland	do														.50										T.	.18		.36	.40	T.		1.44
Buchanan	do				T.										.04														.20	.17		0.41
Callaville	Chowan																															
Cape Henry	Coast			.11	.05		T.				.18	.05			.13							.01	T.					.10	.34	.02		0.97
Charlottesville	James		.02	.64											.23	T.								T.	.02	.25		.08	.38	T.		1.64
Clarksville	Roanoke			.80												.20														.05		1.05
Columbia	James		T.	.82											T.													.35				1.17
Danville	Roanoke			.82								T.				.03										T.			T.	.17		1.02
Diamond Springs	Coast			.46	.12	.01						.18			.25	.09							.02						.52	.03		1.68
Hampton	do			.48	.15						T.	.02											T.						.40	.04	T.	1.18
Hot Springs	James	.02														.28									.08	.40			.28	.26	.03	1.35
Ivor	Chowan		.70												.20														.55			1.45
Lassiter	James		.90												.38													1.10				2.38
Lexington	do			.01							T.		T.		.04	T.								.01		.11		.20	.19	T.		0.56
Lynchburg	do		.25	.23											.15													.12	.12			0.87
Newcastle	do				.04																							1.05	.07			1.16
Newport News	Coast			.54	.10	.01						.06			.11								T.						.52	.02		1.36
Norfolk	do			.32	.05						.13	.01			.19							T.	T.					.08	.23	.01		1.02
Petersburg	James			.72											T.													T.	.25	T.		0.97
Randolph	Roanoke			1.06												.20														.22		1.48
Richmond	James		.06	.58	.01						T.				.05								T.	T.				.03	.24			0.98
Rocky Mount	Roanoke			.10										.20														.09	.28			0.67
Saxe	do			1.08											.23														.39			1.70
Spottsville	Chowan		.10	.50	.08						T.				.14								.06					.08	.12	.06		1.14
Williamsburg	James			.05	.20										.15														.40			1.40
North Carolina.																																
Beaufort	Bogue Sound			.30			.23																						.34			0.87
Belhaven	Pungo			.22																									.26			0.48
Brewers	Pedee																															
Caroleen	Santee		T.	.10																								.02	.12			0.24
Chalybeate Springs	Cape Fear			.45								.09			T.	.02												T.	T.			0.56
Chapel Hill	do			.34		T.						T.			T.	2.00													.14			2.48
Charlotte	Santee		.21	.06																						T.		.05	.04			0.36
Chimney Rock	do																											.25	.15			0.40
Clinton	Cape Fear																															
Durham (near)	Neuse			.40											.12	.23													.20			0.95
Eagletown	Chowan			.47		T.	.05					.05			.35													T.	.14	T.		1.06
Edenton	Albemarle Sound			.40												.20													.40			1.00
Enfield (near)	Tar			.40	.01											.17													.10			0.68
Fayetteville	Cape Fear			.59								.10																	T.	.10			0.79
Goldsboro	Neuse			.02								T.				.01													T.				0.03
Graham	Cape Fear			.53												.10													.06				0.69
Greensboro	do			.60	.05																								.15	.10			0.90
Greenville	Tar			.15	.01		.01									.12									.02				.01	.03			0.37
Hatteras	Pamlico Sound			.19			.07								.03							T.							.09				0.38
Henderson	Tar and Roanoke		T.	.28		T.									.22														.75				1.25
Kinston	Neuse			.19																									.07				0.26
Lenoir	Santee			.15																									.15				0.30
Lexington	Pedee																															
Lincolnton	Santee																											.15					0.15
Louisburg	Tar			.47						T.						.33													.09				0.89
Lumberton	Lumber			.35			.08																			T.			.03	.26			0.72
Manteo	Roanoke Sound			.32											.12														.10				0.54
Marion	Santee		T.												.06										T.	T.		.03	.11				0.20
Moncure	Cape Fear		T.	.36							T.	.27				.04													.01				0.68
Monroe	Pedee			.20																									.16				0.36
Morganton	Santee			.11																								T.	.10	T.			0.21
Mount Airy	Pedee		.08	.30											.26											.04		T.	.34				1.02
Mount Holly	Santee			.42																								.12					0.54
Nashville	Tar			.48			.02					T.				.66									T.	T.			.06	.04			1.26
Newbern	Neuse				.23																									.26			0.49
Pinehurst	Lumberton			.37								T.																	T.				0.37
Pittsboro	Cape Fear																															
Raleigh	Neuse			.40							.21				.07													T.	.01				0.69
Ramseur	Cape Fear			.40																									.16				0.56
Randleman	do			.49								.04				.25													.04	.05			0.87
Reidsville	do			.74												.18												T.	.17				1.09
Rock House	Savannah					.13					T.				.01									T.		.04		.65	T.		T.		0.83
Rockingham	Pedee		.45																									.08	.08				0.61
Rocky Mount	Tar				.40	T.						.20				.30													.07	.08			1.05
Roxboro	Roanoke			.80											.20														.22				1.22
Salem	Pedee		.51																										.17				0.68
Salisbury	do				.52																								.06	.10			0.68
Saxon	Roanoke			.44											.16																		0.60
Scotland Neck	Tar			.40								.05			.06	.03													.15				0.74
Selma	Neuse			.40											.35															.10			0.85
Settle	Pedee			.20																								T.	.08				0.28
Sloan	Cape Fear			.16		.11																								.22			0.49
Snow Hill	Neuse			.15												.12																	0.27
Southern Pines	Cape Fear			.48																								T.					0.48
Southport	do			.40			.37													.05	.11								.87				1.81
Statesville	Pedee			.12	.12																							T.	.10				0.34
Tarboro	Tar			.32		T.						.23				.25													.13	.02			0.95
Troy	Pedee																															
Weldon	Roanoke			.31	.03		T.				T.	.04				.24										T.			.20	.18			1.00
Whiteville	Waccamaw		.30																	.54									.43				1.27
Willard	Cape Fear			.27																									.34				0.61
Wilmington	do			.18		.02	.36												T.	.04								T.	.42				0.92
Yanceyville	Roanoke																															
South Carolina.																																
Aiken	Edisto																	.70														0.70
Allendale	Savannah			.12			.47													.54	.56								.59	.29			2.57
Anderson	do																											.04	.14				0.18
Batesburg	Edisto																				.27								.35				0.62
Blackville	do			.05			.47					.02							.03	.13	.62				.01				.45	.03			1.82
Blairs	Broad																				.03												0.03
Bowman	Edisto			.08																.74								1.47					2.29
Calhoun Falls	Savannah																									.35							0.35
Camden	Wateree			.20			.10														.12								.05	.14			0.62
Catawba	Catawba			.20																									.10	.14			0.44
Chappells	Saluda																																0.00
Charleston	Ocean			.08		T.	.30												.06	.56	.07							T.	.52				1.61
Cheraw	Pedee			.32			.09																						.03	.23			0.61

TABLE 2.—*Daily precipitation for November, 1910. District No. 2*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
South Carolina—Con.																																
Clemson College	Savannah																												.33			0.33
Columbia	Congaree		.02	.04		.04	.02					T.							T.	.29				T.				T.	.18			0.59
Conway	Waccamaw			.32			.45													.05	.19								.05	1.25		2.31
Darlington	Pedee			.28			.18														.10								.20			0.76
Dillon	Little Pedee			.42		T.														.24	.02					T.		T.	.57			1.25
Effingham	Lynches																				.20								T.	.25		0.45
Ferguson	Santee							.46												.23	.05											0.74
Florence	Pedee			.22			.14														.04								T.	.40		0.80
Georgetown	Ocean			.26			.36												T.	.48	.28								.75			2.10
Greenville	Saluda					T.																							.30			0.30
Greenwood	....do																				.18								.22			0.40
Heath Springs	Waterce	.30								T.																		T.	.26			0.56
Jacksonboro	Edisto			.10			.37													1.05	.53							.57				2.62
Kingstree	Black			.21			.55													.05	.50					T.				.41		1.72
Liberty	Savannah		T.			T.																			T.	T.		.50	.10			0.60
Little Mountain	Saluda																			.12	.30							.07	.30			0.79
Meriwether	Savannah					T.					T.				T.					.72					.10			.39				1.21
Newberry	Saluda			.01			.10													.15					.01			.02	.30			0.59
Pelzer	....do						T.																						.28			0.28
Pinopolis	Cooper		.26				.10													.77									.70			1.83
St. George	Edisto			.30		.41														.20	.50									.60		2.01
St. Matthews	Santee						.44													.47	.60					.10						1.61
Saluda	Saluda																															
Santuc	Broad					T.					.05									T.								T.	.09			0.14
Smith Mills	Pedee			.17			.32													.11	.23									.42		1.25
Society Hill	....do		.35																									.12	.18			0.65
Spartanburg	Broad			.02																						T.		T.	.18			0.20
Summerville	Ashley			.17			.46					T.							T.	.68	.29								.57			2.17
Trenton	Edisto						T.									.10				.50	.21							.47				1.28
Trial	Santee																															
Walterboro	Ashepo			.11			.40												T.	.96	.33								.83			2.63
Winnsboro	Broad					T.														.08					T.			.40				0.48
Winthrop College	Catawba			.12		T.					T.																	.05	.10			0.27
Yemassee	Combahee			.03			.29													.50	.86								T.	.30		1.98
Georgia.																																
Abbeville[‖]	Ocmulgee						.45					.05							.06	1.68	.40								.66	.05		3.35
Adairsville[‖]	Coosa		T.				.10																		.08			T.	.33			0.51
Albany[‖]	Flint						.62	.08											.10	1.68	.32								.66	.10		3.56
Allapaha[‖]	Allapaha						.40													1.73	1.45								.07			3.74
Americus[‖]	Flint			.08			.42												.10	1.00	.60								.85			3.05
Athens[‖]	Oconee						.04					T.				T.					.06								.13			0.23
Atlanta	Chattahoochee		T.			.20					T.				.02		T.		T.	.15				T.	T.			.05	.15			0.57
Augusta	Savannah		T.	.01		.15	.11				T.				T.			.01	.01	.48								T.	.58			1.35
Bainbridge[‖]	Flint			.07			.45					T.							.04	1.37	.45								.50			2.88
Barnesville	....do	T.				.40	.15				T.								.15	.35									.58			1.63
Blakely	Chattahoochee																															
Butler[‖]	Flint			T.			.28					.15							.06	.27	.33								.22			1.31
Camak[‖]	Savannah						.23														.52								.90			1.65
Canton[‖]	Coosa		T.				.08					T.				.20									.14			.08	.32			0.82
Carlton[‖]	Savannah																				.10								.09			0.19
Clayton	....do		T.			.12					T.														T.			1.00				1.12
Columbus[‖]	Chattahoochee			T.			.26					T.				T.		T.	.06	.19	.25					T.		T.	.73			1.49
Covington[‖]	Ocmulgee						.25						.15			.10					.25								.23			0.98
Cuthbert[‖]	Chattahoochee					.55													.80	.37								1.30				3.02
Dahlonega	....do		T.								.08				T.									T.	.02			.42	.26			0.78
Diamond	Tennessee		.02			T.					.19				.03									T.	.04			.94				1.22
Dublin[‖]	Oconee			T.			.26												T.	1.04	.76								.14			2.20
Dudley	....do					T.	.05					T.					T.	T.	.35	1.06	.06							T.	.13			1.65
Eastman[‖]	Ocmulgee						.08												T.	.24	1.90								.71	.64		3.57
Eatonton	Oconee					.21	.15													.60									.70			1.66
Elberton	Savannah										T.				T.					.12	T.				T.	T.		T.	.12			0.24
Experiment	Chattahoochee						.45												.10	.23						.02			.50			1.30
Fort Gaines[‖]	....do						.57												T.	.85	.35								.77			2.54
Gainesville[‖]	....do																												.53			0.53
Gillsville	Oconee		T.			T.					T.				T.										T.			.08	.12			0.20
Glennville[‖]	Altamaha					.45						T.							*	2.46						T.		T.	.43			3.34
Gore	Coosa			T.		.06																		T.	.05	T.		.64	T.			0.75
Greensboro[‖]	Oconee			T.			.32													T.	.23								.69			1.24
Griffin[‖]	Chattahoochee						.44												.03	.03	.22								.58			1.30
Harrison	Ogeechee			.03		.22					.03								.11	1.34									.04			1.77
Hartwell	Savannah																									.12						0.12
Hawkinsville[‖]	Ocmulgee						.30													1.20	.36								.92			2.78
Helena	....do						.46					.01							.07	1.54	.10					T.		T.	.66			2.84
Lafayette	Tennessee		.31								T.													.09				.97				1.37
Lisbon	Savannah										.02									.16								T.	.15			0.33
Lost Mountain	Chattahoochee																								.10			.48			T.	0.58
Louisville	Ogeechee					.35														1.10									.69			2.14
Lumber City[‖]	Ocmulgee						.38					.04								1.98	1.00								.02	.24		3.66
Lumpkin[‖]	Chattahoochee					.60						T.						T.	*	1.70								.41				2.71
Macon	Ocmulgee					.25	.02											.02	.15	.84								.02				1.64
Marshallville[‖]	Flint			.04		T.	.30					.15							T.	1.50	.04							T.	.10			2.13
Mauzy	Suwanee						.50												.35	2.53									.38			3.76
Milledgeville[‖]	Oconee						.35												.08	.31	.57								.82			2.13
Millen[‖]	Ogeechee						.30													.90	.35									*	.25		1.80
Montezuma[‖]	Flint						.48					.04							.52	1.36	.80								.28			3.48
Monticello[‖]	Ocmulgee			.13			.35									.03			.09	.13	.34							.03	.81			1.91
Morgan	Flint						.50												.90	.40	.11								.47			2.38
Newnan[‖]	Chattahoochee											.55				.10				.04	.37							.10	1.00			2.16
Norcross[‖]	....do						.06					.04				.01					.04							.01	.32			0.48
Point Peter	Savannah					T.				T.					T.					.16								.12				0.28
Poulan	Suwanee						.37			.05									.25	.81									.14			1.62
Putnam	Flint																		1.30	1.00									.30			2.60
Quitman[‖]	Suwanee						.70	.30												.80	.61								.35			2.76
Ramsey	Coosa		.10			.12					.08													.05		.09		.75				1.19
Resaca[‖]	....do			T.		T.				T.														.24					.68			0.92
Rome[‖]	....do		T.			T.	.28					.06													.04	T.			.38			0.76
St. George[‖]	St. Marys				T.		.65									.14					.90									.10		1.79
St. Marys	....do																															
Savannah	Savannah			.01		.03	.47											T.	.11	1.50	.18					T.		.01	.43			2.74
Statesboro[‖]	Ogeechee		.05			.31	T.				.01								.80	.68								T.	.60			2.45
Talbotton	Chattahoochee						.30								.05			T.	.20	.35									.93			1.83
Tallapoosa[‖]	Coosa						.52					T.			T.	.03			T.	T.	.04				.05					.55			1.19
Thomasville	Ochlochnee			.02		.07	.36												3.23	1.06	T.							T.	.53			5.27
Toccoa[‖]	Savannah																												.50			0.50

TABLE 2.—*Daily precipitation for November, 1910. District No. 2*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Georgia—Continued.																																
Valdosta‖	Suwanee						.20	.70												.65	.85								.32	.25		2.97
Valona	Ogeechee						.70													2.15									.35			3.20
Washington‖	Savannah						.12													.02	.48								.42			1.04
Waycross‖	Satilla						.52	.32												1.25	.90								.11	.03		3.13
Waynesboro‖	Savannah			T.			T.					T.							.04	.40	1.25			.23					.72			2.64
West Point‖	Chattahoochee			T.			.50					T.							.14		.26								.44			1.34
Woodbury‖	Flint						.57														.34								.60			1.51
Florida.																																
Apalachicola	Coast																		T.	2.52									.21			2.73
Arcadia	Peace Creek						.26			.10										.19	.02									.01			0.58
Archer	Waccasassa																			1.23	.25								2.00			3.48
Avon Park	Kissimmee	.03					.13	.02											T.	.13		T.							T.			0.31
Bartow‖	Peace Creek							.20												.07	.83												1.10
Blountstown‖	Apalachicola																		T.	1.00									.80				1.80
Bonifay	Choctawhatchee					T.														1.40										.93			2.50
Brooksville	Withlacoochee						.17													1.54										.15			2.11
Carrabelle	Coast					.42														.90										.19			1.40
Cedar Keys	....do						.31													1.20										.80			2.28
Clermont	Lake						.28																										
De Funiak Springs	Choctawhatchee																T.			.94	.02								.45				1.62
De Land	St. Johns	.05					.10	.06												.95									.25				1.30
Eustis‖	Lake						.12													1.27	.10	.01			.02				.73				2.47
Federal Point	St. Johns	T.					.25	.09												.83	1.00												1.83
Fenholloway	Fenholloway						.44	.02												.60	.04								.03				1.13
Fernandina	Coast						.29												T.	.94													1.23
Fort Meade	Peace Creek						.27			.04										.58													0.89
Fort Myers	Caloosahatchee	T.									.60																						1.08
Fort Pierce	Indian	.10	.38				.02	.38												.10	.99									1.30			2.79
Gainesville‖	Lake						.14	.06												1.05									.30				1.45
Grasmere	....do						.80												1.00	.10									.80				2.70
Hilliard	Nassau	.15	.12								.04			.03						.41													0.75
Homestead	Coast																																
Huntington	St. Johns																																
Hypoluxo	Lake																			1.19									.61				1.98
Inverness‖	Withlacoochee						.18				T.									.87	.02					T.		T.	.11				1.64
Jacksonville	St. Johns						.64																										
Jasper‖	Suwanee																			.56									.52				1.53
Johnstown	....do						.45													.44													1.31
Jupiter	Coast	.55	.25				.01	.03	.01	.02										.20									.23				1.35
Key West	....do							.92												.46									.17				0.63
Kissimmee	Kissimmee						T.													.25	T.								T.				1.22
Lake City	Suwanee						.97													.60	.20							.40					2.05
Live Oak‖	....do						.70	.15																									
Macclenny	St. Marys																			1.24	.25								1.28	.40			4.01
Madison‖	Suwanee			.02			.47	.26												.08									.20				0.74
Malabar	Indian	.10	.05				.12			.19										1.80									.05				2.15
Manatee	Manatee						.30												T.	1.48	.14								.41				2.43
Marianna‖	Apalachicola			.05			.35													.45									.17				0.67
Merritts Island	Indian						.05													.45													0.45
Miami	Coast																																
Miami (Subtropical)	....do																			1.20								*	.30				1.50
Middleburg	St. Johns																		*	.94													2.34
Molino	Escambia					1.40																											
Monticello	Aucilla																		.90	2.00									1.00				4.47
Mount Pleasant	Apalachicola						.57									T.			1.40										.62				2.62
Newport	St. Marks					.60														.15	1.40					.21							2.02
New Smyrna	Coast							.26													2.10									.24			2.79
Ocala‖	St. Johns							.45																					.24				0.63
Orange City	....do						.18									.21													1.18				2.80
Orlando	....do	T.					.06													1.51	.05						T.	.01	.09				2.15
Pensacola	Coast			.02		1.11	.13												.35	.44													0.95
Plant City	Hillsboro																			.95										.20			0.65
Rockledge	Indian						T.														.45								.30				2.00
Rockwell	Withlacoochee						.30													2.00									1.78				4.57
St. Andrew	Coast						1.34	.02											.11	1.32									1.45				3.73
St. Augustine	....do						.60	.18												1.30	.20												
Sand Key	....do															.03				1.42							T.		.91				2.54
St. Leo	Withlacoochee						.18													2.14									.93				3.29
Satsuma Heights	St. Johns						.22														.80								.50				1.73
Switzerland	....do						.43													1.75	.70								1.25	.20			4.75
Tallahassee‖	Ocklocknee						.80	.05											T.	1.72	T.								.06				1.94
Tampa	Coast						.16													1.28									.17				1.79
Tarpon Springs	....do						.34													.62	.02					.02			.83				1.58
Titusville	Indian						.09																										
Wausau	Choctawhatchee																																
Alabama.																																
Alaga	Chattahoochee						.64					T.					*	*	*	.82	.14					T.			T.		.03		1.60
Anniston	Coosa					.61					T.				T.		T.	T.	T.	.05				.01				.64				1.34
Ashville	....do										.50				T.			T.						T.		.74		.15	.02		T.	1.41
Auburn	Tallapoosa		T.	.03		.32	.11				.01					.01	T.	.02	.15	.21	.19					.02		T.	.45				1.52
Benton	Alabama					1.12													.28	.32									1.54				3.26
Bermuda	Escambia			.20		1.36					T.									.84	.08							T.	1.02				3.50
Birmingham	Black Warrior		.01			.61					.01				T.		T.	T.	T.			.01		.04		T.		.78				1.46
Calera	Coosa					.09	.50													.20	.05									.20			1.04
Camp Hill	Tallapoosa					.55	.10				T.								T.		.25	.15												1.05
Cedar Bluff	Coosa						.04																						40				0.44
Citronelle	Alabama					.75	.40											.36	.19	.14									.06	.17			2.07
Clanton	Coosa						.47									.10		.03	.25	.05	.15						.04		.05	.95			2.09
Cochrane	Tombigbee																																
Cordova	Black Warrior					.53					T.						T.	T.	T.					.15					.48				1.16
Cullman	....do		T.			.52					.05				T.			T.						.03					.40		.15		1.15
Dadeville	Tallapoosa			.23			.68													.28	.65									.30			2.14
Daphne	Gulf of Mexico					.62	1.40								T.	T.				.30	.50									.10			2.92
Demopolis	Tombigbee		.06	.08			.90													.48	.10	.22								.54			2.38
Eufaula	Chattahoochee			T.			.64						.04							.16	.72	.52								.80			2.88
Evergreen	Escambia			.06														.10		.32	.18	.10							1.25				2.01
Flomaton	....do					1.24	.12												1.20	.46										.18			3.20
Fort Deposit	....do						1.20													.12	.70	.90								.63			3.54
Gadsden	Coosa					T.	.42						.04			T.										.14				.28		.01	0.89
Goodwater	....do						.62									T.				.40										.60			1.62
Greensboro	Black Warrior		.12			.67					.02					.02		.02		.32	.22							.97				2.36
Greenville	Escambia						1.34													.51	.65								.72				3.22

TABLE 2.—*Daily precipitation for November, 1910. District No. 2*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Alabama—Continued.																																
Hamilton	Tombigbee					.43					.16							.22	.55	1.40					.07			.59				1.25
Highland Home	Escambia			T.		.78	.23												.22	.55	1.40							T.	.57			3.75
Livingston	Tombigbee		.25				.94													.41	.25								1.37			3.22
Lock No. 4	Coosa					.42	.02				T.										.03							.88			T.	1.05
Lucy	Chattahoochee																															
Maple Grove	Coosa				.05	.23					.05				T.		T.	T.						.07	.05		T.	.79		T.		1.24
Mentone	....do						.18																		T.				.88			1.06
Milstead	Tallapoosa						.80						.06						.16	.12	.22								.78			2.14
Mobile	Gulf of Mexico		T.	.05		1.12	.06									T.	T.	T.	.65	.15								.05				2.08
Montgomery	Alabama		T.			.66					T.						T.	.15	.02	.83								.50	.59			2.75
Newbern	Black Warrior		.19			.77					T.				.03		.04	.35	.06	.32								.86				2.62
Oneonta	....do					.60	.02				.14							T.	T.						.30			.28	.03		.07	1.44
Opelika	Tallapoosa			.09			.46									T.		T.	.14	T.	.30								.55			1.54
Ozark	Gulf of Mexico						.30											.10	.95	.25									.60			2.20
Prattville	Alabama																															
Pushmataha	Tombigbee					1.25											T.	.70		.77								1.12				3.84
Selma	Alabama			.08			.90					T.						T.	.36	.02	.54									.70			2.60
Spring Hill	Gulf of Mexico					2.75												T.	.48	.40								.08				3.71
Talladega	Coosa																															
Tallassee	Tallapoosa			T.			.62				.03					.01		T.	.17	T.	.18								1.01			2.02
Thomasville	Tombigbee						2.05										T.	.05	.50	.39	.47								1.46			4.92
Troy	Escambia		.03			.61		.28										.29	.48	1.09	.03						T.	.02	.96			3.79
Tuscaloosa	Black Warrior					.15	.31					.04			.01	.02	T.	T.	.07	T.	T.				.03			.01	.08			0.72
Tuskegee	Tallapoosa					.70					T.								.35	.23	T.							1.04				2.32
Union Springs	....do			T.				.32				T.							.40	.62	.19								.28			1.81
Uniontown	Black Warrior		.15			.99	.11										T.	.18	.30	.57							T.	.55			2.85
Valley Head	Coosa					T.					T.													.36	T.			.61	.26			1.23
Wetumpka	....do						.67												.31		.15								.81			1.94
Mississippi.																																
Aberdeen‖	Tombigbee					.32					.38						T.								.24			.20	.14			1.28
Agricultural College	....do					.38					.15						.05	T.	T.						.25			1.10				1.93
Bay St. Louis	Miss. Sound			.06		.11	.18									T.			.30	.16								.09	.13			0.95
Biloxi	....do			.05		.06	.28									T.			.13	.34									.29			1.15
Booneville	Tombigbee																							.04	.01			.54	.15			0.74
Brookhaven‖	Pearl			.19			1.78											.12	1.40	.37	.08								.30			4.24
Columbia‖	....do			T.		T.	2.40											.56	.68	.10	.02						.02	T.	.22			4.00
Columbus‖	Tombigbee		T.			.18	.30					.04					T.		T.						.24			T.	.92			1.68
Crystal Springs‖	Pearl		.10				.65											.50	.76	.35	.17								1.00			3.53
Edinburg	....do		.04			.62					T.				T.		.24	.02	.13	T.					T.	T.	T.	.81				1.86
Enterprise‖	Chickasawhay		.06				1.43				T.							.24	.98	.24	.33							.04	1.00			4.32
Fulton‖	Tombigbee					.34	.03				.04														.32			.12	1.04			1.89
Hattiesburg	Leaf						1.50												.36	.12								T.	T.			1.98
Hazlehurst‖	Pearl						1.45											.50	1.40	.50	.08								1.60			5.53
Hickory	Chickasawhay					.90											.45	.40	.25	.12							1.32					3.64
Jackson	Pearl		.22	.01		.40	T.				T.				T.		.38	.13	.30	.10					T.		T.	.58				2.12
Lake‖	....do		.10			.94											.25	.20	.18	.10								.80				2.57
Lake Como	Leaf																															
Laurel	....do		.10			1.30	.01				T.	T.			T.		.01	.75	.22	.50	T.	T.			T.	T.	T.	1.70	.98			5.57
Leakesville‖	Chickasawhay			.08		1.03												.40	.60									.14	1.21			3.46
Louisville	Pearl					.38											.30		.04									.31				1.03
McNeill	....do				T.	.33									T.	.45		.04	.40	.45									.20			1.87
Macon‖	Tombigbee		T.			T.	.27					T.				T.	.12		.05								T.	.29				0.73
Magnolia	Pearl		T.	T.		1.30											.08	1.37		.16								.30				3.21
Meridian	Chickasawhay		.04		1.09												.19	.55	.11	.23					.01	T.		.59				2.81
Merrill‖	Pascagoula			.06			1.56											.06	.30	.40									.26			2.64
Monticello	Pearl		.12	.01		1.30	.05										.10	1.80	.32	.72	.02							T.				4.44
Okolona‖	Tombigbee					.20	.15				.07														.08				.23			0.73
Pascagoula	Pascagoula Bay					.15	.22				.23								.20	.70							.02					1.52
Pearlington	Pearl					.18										.22		.12	.30													0.82
Porterville	Tombigbee		.21			1.15											.17	T.	.34	.43					T.							2.30
Shubuta‖	Chickasawhay			.06		.04	1.40								.02			.08	1.06	.50	.28								.56			4.00
Waynesboro‖	....do			T.		T.	1.30												.45	.42	.08	T.							1.40			3.65
Woodland	Tombigbee					.34				.09							.08	.05							.02			.83				1.36
Louisiana.																																
Pearl River	West Pearl			.04			.38									.04	.10	.16	.24	.20	.16							T.	.30			1.62

MONTHLY WEATHER REVIEW.

NOVEMBER, 1910.

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 2, South Atlantic and east Gulf States.*

Date.	Virginia.							North Carolina.										South Carolina.							Georgia.						
	Lynchburg.		Norfolk.		Richmond.		Saxe.	Charlotte.		Edenton.		Fayetteville.		Hatteras.		Kaleigh.		Newbern.		Reidsville.		Salisbury.		Wilmington.		Charleston, S. C.		Columbia.		Conway.		Georgetown.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	64	32	62	44	66	34	63	68	34	68	34	70	34	66	46	67	32	72	31	67	32	74	31	72	32	68	45	69	36	73	36
2	58	34	64	46	62	36	62	64	34	68	34	68	34	60	42	73	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
3	51	36	54	41	56	34	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
4	52	41	54	43	56	34	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	51	32	52	38	54	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
7	57	32	62	44	62	32	62	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
8	63	34	64	46	66	34	64	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
9	64	34	64	46	66	34	64	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
10	68	34	64	46	66	34	64	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	44	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
13	44	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
14	46	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
15	46	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	46	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
18	51	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
19	48	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
20	48	32	52	38	52	32	56	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	35	23	56	36	54	24	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
23	35	23	56	36	54	24	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
24	35	23	56	36	54	24	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
25	36	23	56	36	54	24	58	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	56	22	48	36	51	24	54	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
28	46	32	48	36	46	26	50	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
29	42	32	44	34	42	26	46	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
30	42	32	44	34	42	26	46	64	34	68	34	68	34	58	42	72	36	72	34	68	34	72	34	72	34	68	46	72	40	75	40
Mns...	51.7	33.2	52.7	38.2	52.0	32.8	56.4	63.4	34.0	67.0	33.5	62.7	36.0	57.7	44.9	55.9	36.5	62.6	33.3	57.1	32.7	60.6	32.3	60.9	40.1	63.4	45.9	63.2	40.0	62.4	38.7	64.5	41.9

Date.	Georgia.															South Carolina.															
	Savannah.		Macon.		Dahlonega.		Augusta.		Atlanta.		Albany.		Adairsville.		Columbia.		Conway.		Georgetown.		Greenville.		No. Therry.		Society Hill.		Trial.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.					
1	66	42	68	34	64	34	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
2	72	42	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
3	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
4	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
6	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
7	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
8	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
9	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
10	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
12	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
13	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
14	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
15	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
17	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
18	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
19	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
20	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
22	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
23	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
24	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
25	66	40	68	36	64	36	68	36	66	36	72	32	68	32	69	36	71	36	67	32	73	36	72	32	64	41	.....	.....			
26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
27	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
28	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
29	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
30	72	40	72	36	68	36	72	42	68	42	72	36	72	36	73	40	75	40	72	36	72	40	72	36	68	42	.....	.....			
Mns...	65.4	45.5	63.0	40.3	58.3	36.0	64.0	39.8	64.4	40.7	68.7	42.4	60.6	34.4	63.2	40.0	62.4	38.7	64.5	41.9	63.8	34.1	63.9	36.9	59.3	30.2	.....	.....			

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 2*—Continued.

Date	Georgia.						Florida.																			
	Thomasville.		Waycross.‡‡		West Point.‡‡		Avon Park.		Fort Myers.		Gainesville.‡‡		Jacksonville.		Jupiter.		Key West.		Miami.		Orlando.		Pensacola.		Tallahassee.‡‡		Tampa.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min
1	74	34	78	35	.....	33	75	57	77	58	71	45	70	52	77	62	74	65	81	63	78	58	70	50	70	42	76	56
2	77	44	78	44	.....	38	79	61	77	65	77	54	78	54	80	64	76	67	83	64	80	56	73	55	74	48	79	59
3	63	42	69	49	.....	37	81	54	76	59	70	52	68	49	79	62	78	68	82	64	79	50	63	45	63	52	76	54
4	63	34	68	35	.....	29	68	41	66	53	61	38	61	40	70	52	71	64	72	57	69	43	60	43	61	37	63	47
5	72	37	72	36	.....	30	76	40	69	46	73	38	70	44	72	50	71	60	75	45	73	37	70	52	72	37	70	47
6	60	38	52	46	.....	42	73	47	75	50	61	40	60	46	75	56	75	58	81	53	70	50	58	42	57	41	65	52
7	61	34	63	36	.....	31	70	50	68	50	62	40	61	40	74	58	76	65	76	65	70	47	63	37	60	37	68	47
8	69	34	65	35	.....	33	75	53	73	55	67	40	68	45	77	60	73	65	80	60	74	48	64	47	66	39	72	49
9	73	39	75	38	.....	34	80	53	78	59	72	41	72	50	78	67	76	63	84	64	77	44	66	52	70	44	78	51
10	75	43	77	44	.....	37	80	55	77	59	77	43	73	52	81	64	77	67	85	68	80	55	74	60	73	48	74	59
11	68	43	71	51	.....	37	82	54	77	58	73	52	72	55	80	59	77	68	80	60	80	53	71	52	68	49	77	59
12	64	41	64	42	.....	32	71	52	70	51	65	47	63	48	72	55	74	65	75	52	71	49	70	50	64	45	64	53
13	70	38	68	35	.....	32	71	42	70	52	67	39	66	43	69	50	71	62	73	52	72	44	68	52	68	41	68	48
14	79	52	78	38	.....	44	78	42	70	48	78	45	76	52	73	51	73	61	78	44	78	42	75	66	77	51	74	50
15	73	47	73	53	.....	43	82	50	76	49	70	48	78	56	80	55	75	63	81	53	81	55	74	57	74	60	77	62
16	64	43	69	41	.....	37	81	60	78	58	71	50	69	47	75	61	76	64	81	53	77	56	65	52	65	45	76	59
17	70	45	72	43	.....	41	81	52	78	58	74	48	74	51	78	60	79	67	82	61	79	47	66	53	68	48	77	55
18	60	55	50	42	.....	44	82	53	79	59	79	48	77	56	78	64	79	73	80	71	80	51	60	55	63	50	77	61
19	59	47	57	48	.....	45	74	66	74	67	67	52	64	49	78	68	77	74	80	70	79	65	57	50	65	56	72	66
20	65	45	62	44	.....	38	71	58	71	62	58	50	57	47	72	62	77	63	78	65	71	55	62	49	64	45	66	56
21	67	40	69	39	.....	35	74	56	72	58	67	48	66	52	73	60	72	65	75	61	74	55	66	48	65	46	70	56
22	73	44	72	41	.....	37	74	53	72	57	71	47	71	49	72	58	74	67	78	62	73	49	71	54	70	47	72	54
23	76	46	76	43	.....	37	77	44	73	54	77	46	74	53	75	55	74	67	80	59	75	46	71	59	71	49	73	49
24	77	53	77	48	.....	39	76	46	74	54	74	48	73	56	77	57	78	67	80	58	76	52	73	63	74	52	73	56
25	79	54	80	58	.....	52	81	47	76	54	77	52	79	60	78	56	76	66	78	58	79	49	76	61	77	56	75	58
26	79	48	79	43	.....	39	80	58	77	64	78	51	77	55	79	60	75	68	82	58	78	52	71	57	75	55	78	61
27	73	58	79	50	.....	39	86	46	77	49	76	48	77	56	79	59	78	67	78	58	82	47	71	68	77	55	77	56
28	73	43	.....	59	.....	40	80	54	77	58	74	46	72	50	79	62	79	68	81	57	78	52	68	46	71	60	73	62
29	56	56	59	37	.....	33	74	52	67	60	62	39	60	41	71	50	75	64	75	60	67	47	60	38	57	38	62	49
30	53	36	49	37	.....	34	68	37	67	49	57	37	55	40	66	44	71	62	68	46	62	40	52	39	52	37	60	46
Mns..	68.8	43.1	69.0[a]	43.0	.....	37.3	76.7	51.1	73.7	55.8	70.2	45.7	69.4	49.6	75.6	58.0	75.2	65.6	78.7	58.7	75.4	49.8	66.9	51.7	67.7	47.0	72.1	54.6

Date.	Alabama.																Mississippi.							
	Anniston.		Bermuda.		Birmingham.		Eufaula.‡‡		Mobile.		Montgomery.		Tuscaloosa.‡‡		Uniontown.		Columbus.‡‡		Hattiesburg.‡‡		Jackson.		Meridian.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	68	36	.....	.....	69	46	65	28	71	44	70	38	68	33	72	36	74	30	72	30	78	35	71	36
2	66	46	73	.....	63	43	70	32	75	50	69	46	63	35	68	43	64	35	76	32	61	46	65	47
3	51	30	59	39	52	34	58	40	66	47	57	39	54	35	59	36	55	34	65	43	60	38	55	35
4	57	26	64	30	60	28	59	29	64	40	61	34	58	29	62	31	61	26	66	32	69	32	62	31
5	46	42	61	41	50	43	60	39	71	52	55	44	50	29	57	45	50	28	58	42	60	46	57	43
6	52	29	59	44	50	35	56	40	57	43	56	41	52	37	54	40	53	34	60	34	55	37	52	34
7	61	37	63	31	61	32	57	31	64	40	62	36	54	0	66	33	67	27	68	40	71	29	63	31
8	68	35	69	3	69	44	66	32	66	44	68	37	68	32	70	37	74	28	.....	35	74	33	69	39
9	70	37	72	35	70	46	65	34	71	49	69	40	68	35	68	38	76	34	.....	.....	78	35	71	38
10	62	40	77	43	61	46	73	35	77	53	72	44	64	38	73	46	70	37	80	.....	74	54	70	50
11	59	33	67	42	60	39	64	40	71	52	66	43	62	35	68	40	64	33	.....	40	70	36	64	37
12	53	32	.....	.....	56	35	60	34	72	48	63	40	58	32	67	38	62	31	.....	.....	75	34	65	36
13	64	28	.....	.....	63	38	67	33	72	48	68	38	64	34	72	36	71	33	.....	.....	81	42	74	39
14	72	48	.....	.....	71	49	76	40	78	61	76	55	75	40	78	57	78	43	.....	.....	82	59	76	56
15	54	36	.....	.....	54	36	65	52	67	55	62	44	55	39	70	45	56	37	.....	.....	68	50	56	45
16	50	34	.....	.....	48	37	59	37	65	52	54	41	50	38	53	44	50	37	.....	.....	54	42	48	42
17	53	32	.....	.....	51	40	61	40	60	51	55	46	55	39	52	45	51	40	.....	.....	47	44	46	43
18	54	43	.....	.....	53	43	53	46	57	50	55	46	55	40	55	45	54	44	.....	.....	49	45	51	43
19	51	41	.....	47	52	42	52	43	53	48	53	43	54	43	50	44	59	43	.....	.....	59	45	51	43
20	61	34	66	43	62	36	60	40	62	49	64	44	60	34	63	45	65	29	.....	.....	60	33	56	40
21	64	36	70	40	65	40	63	36	66	46	67	43	65	38	58	41	70	30	70	.....	72	36	66	37
22	68	39	74	38	69	47	69	38	73	52	71	46	65	35	74	49	76	36	.....	38	78	41	72	47
23	71	41	75	41	71	50	70	40	69	57	73	46	77	38	75	46	73	37	.....	.....	80	50	75	50
24	76	56	80	47	75	57	74	43	73	60	77	57	70	45	73	52	76	51	78	.....	77	58	70	56
25	70	40	76	52	72	50	75	50	78	62	78	57	75	53	74	61	74	54	80	54	77	62	72	56
26	70	38	73	50	73	47	73	41	69	61	76	47	75	46	69	50	76	47	80	55	78	56	72	55
27	72	57	74	56	70	60	71	45	75	64	74	58	74	49	78	59	74	52	80	63	81	62	77	58
28	61	35	70	47	60	35	62	56	71	47	61	41	54	48	72	47	52	45	63	46	62	44	62	38
29	49	30	58	32	50	31	52	32	60	40	55	34	53	31	67	32	53	29	62	31	61	29	55	32
30	41	29	49	30	42	29	46	31	52	39	46	34	44	31	48	32	45	28	63	31	50	32	46	32
Means	60.5	37.0	68.0[b]	41.0[b]	60.7	41.3	63.4	38.6	67.4	50.1	64.4	43.4	61.3	37.4	65.5	43.1	64.1	36.4	70.1[a]	40.4[a]	68.3	42.8	63.0	42.3

Climatological data for November, 1910.
DISTRICT No. 3, OHIO VALLEY.

FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

Unusually cold weather for the season prevailed during nearly the whole of November, 1910, there being comparatively few days when the temperature was as high as the seasonal normal. There was no remarkably cold weather, however, that is, in the way of extremes, although the temperature averaged from 3° to 6° below the normal for November in practically all parts of the Ohio Valley. There were no great or abrupt changes in temperature, the weather being uniformly and moderately cold, and the deficiency in the temperature almost a steady accumulation.

Over much of the district, notably the central, northern, and northeastern portions, the temperature averaged the lowest for any November during the past 20 to 25 years, while over the rest of the district there have been only one or two Novembers during a similar length of time with average temperatures so low. Despite this the temperature extremes were not broken in any locality; in fact, greater extremes have been registered in many of the States of the district in nearly every other November.

The month falls into a division of three cold and three warm periods, but the cold periods were much longer than the warm ones, the latter all together covering only about 8 out of the 30 days of the month. The longest warm period extended from the 23d to the 27th, inclusive, while the longest cold period ran from the 11th to the 21st, inclusive. The coldest weather occurred about the 20th, when minimum temperatures ranged between 7° and 22°. Highest temperatures were registered on dates that differed in the various parts of the district, and they ranged between 68° and 82°.

Over most of the district the month was unusually cloudy, dark, and disagreeable, these conditions largely prevailing over western New York, western Pennsylvania, West Virginia, and the States north of the Ohio River. In Kentucky and Tennessee and over the southern border portions of the district cloudy conditions were not so pronounced, and, as a rule, the total sunshine for the month averaged between 50 and 75 per cent of the amount possible at this time of the year.

Precipitation was generally below normal for November, except in the northeastern portion of the district, where there was a remarkably heavy fall of snow for the month. Rain or snow was frequent over the northeastern portion of the district, but in other portions rains were scattered and mostly light in amount, and there was little or no snow. The most important disturbance of the month was the general rainstorm of the 27th–28th. This caused more or less heavy precipitation in nearly all parts of the district and was attended by an unusually large number of local thunderstorms for the season. Other barometric disturbances that passed over the district were of little consequence. High-pressure areas, persistent and slow in movement, largely dominated.

Rivers and streams in the Ohio River basin were generally at low stages during the month, except those in the northeastern portion of the drainage area, where the heavy snows supplied sufficient water to keep the streams at stages above normal for November. Navigation was impeded in portions of the lower Ohio River and tributaries by low water. In western Pennsylvania and northeastern Ohio the soil was well supplied with moisture, but in other portions of the district the ground had become very dry when relief came in the general rains of the 27th–28th. In some parts of the district the dryness had become so intense that both drinking and stock water were getting scarce. Also in the tobacco-growing sections it had become impossible for the farmers to strip and prepare their tobacco for market.

TEMPERATURE.

The average temperature of the month was below normal in all parts of the district, the amount of deficiency ranging from 3° to 6°. As a rule the greater deficiency was in the northeastern portion of the district and in the Wabash sections of Indiana and Illinois, and the lesser in the extreme western portions of Kentucky and Tennessee. The month opened with the temperature generally above normal, except over eastern Tennessee and western North Carolina. A change to colder, however, came on the 2d and during the next 5 or 6 days mean daily temperatures were from 6° to 17° below normal, and over the more northerly and easterly portions of the district minimum temperatures between 20° and 30° were registered, and over the more southerly sections from 25° to 35°. During the 9th and 10th the mean temperature was above normal and maximum temperatures ranged between 55° and 70°, but following this short warm period cold weather again set in and continued from the 11th to the 20th, when the average daily temperatures ranged from 6° to 14° below normal over practically all the district. On the 14th, however, there was a sharp warming up over Tennessee and western North Carolina, and the mean temperatures in those sections ranged from 4° to 8° above normal on that day. During the period 23d–27th mild conditions prevailed, the mean temperature ranging between 7° and 15° above normal, and maximum temperatures of from 45° to 65° were registered in northern and eastern sections and from 50° to 70° in the other portions of the district. On the 29th and 30th mean temperatures were again decidedly below normal and minimum temperatures of 20° to 30° were registered. This last cool wave set in over the western portion of the district on the 28th. The highest temperature of the month was registered in some localities on the 1st, in others on the 9th, 25th, or 27th. The highest temperature registered in the district during the month was 82° at Guntersville, Ala., on the 25th, while 80° was registered in Tennessee and 81° in Illinois on the 27th. In other States of the district the highest temperatures of the month ranged between 68° and 78°. The lowest temperature of the month occurred in nearly all parts of the district on the 20th, the lowest in the district being 7° at Burkes Garden, Va. In other States the lowest ranged between 10° and 20°. In Tennessee the lowest, 12°, occurred on the 13th.

PRECIPITATION.

The precipitation was below normal in all parts of the district, except in the extreme northwestern portion of Pennsylvania and the bordering sections of Ohio, where there was unusually heavy snow. Precipitation was 3 inches or more over the section mentioned, also over the upper watersheds of the Kentucky River in Kentucky and at one or two stations in east-central Illinois. It was below 1 inch in southern Illinois, northwestern Tennessee, and in western North Carolina. One station, Highlands, N. C., received no precipitation whatever during the entire month. Elsewhere the monthly precipitation was between 1.5 and 2.5 inches.

Rain or snow occurred nearly every day in the northeastern portion of the district, including West Virginia and eastern Ohio, but, except over the upper watersheds of the

Allegheny River in Pennsylvania, and the Mahoning in Ohio, the daily amounts were generally small. Over the rest of the district precipitation was light and scattered during the month up to the 27th–28th, when there were general and heavy rains. Light rain occurred generally on the 2d, 5th, and the 10th in Kentucky and the States north of the Ohio River. In Tennessee and southward the precipitation was unusually light and scattered save for the rains of the 27th–28th. Over most of the district more than one-half, and in some instances as much as 80 per cent, of the precipitation of the month occurred on these two days.

The snowfall, except in the northeastern portion, was of no consequence, there being little or none even in Illinois, Indiana, and western and central Ohio. Over eastern Ohio, however, and over western Pennsylvania snowfall was unusually heavy, being greater than that for any other November during the past 25 years. In northeastern Ohio several stations reported from 10 to 19 inches of snow, and over the northern portion of western Pennsylvania the amount was generally from 10 to 35 inches. The average amount for western Pennsylvania was 11 inches, and at the close of the month this portion of the State was covered to a depth of from 1 to 4 inches. The snowfall in Crawford and Warren Counties, Pa., 33 to 35 inches, exceeded that for any locality in the State for any November during the past 23 years. In West Virginia the snowfall was from 2 to 6 inches in the more northerly counties and 2 to 10 inches in the mountain sections. In western Maryland the amounts were between 15 and 20 inches.

MISCELLANEOUS.

Scattered thunderstorms occurred in Kentucky and portions of Ohio on the 10th and 23d; in Ohio on the 24th and 25th, and generally over the district on the 27th, being severe in some localities on the latter date. Hail fell in Ohio on the 10th, 23d, and 24th, and in Kentucky on the 27th.

A windstorm which attained a maximum velocity of 56 miles per hour did some minor damage to trees and windows in Columbus, Ohio, on the morning of the 10th. During local thunderstorms on the 27th several houses were struck by lightning at Palestine, Ill., resulting in considerable damage to the buildings and more or less injury to several persons. On the same day considerable damage resulted from hail and wind squalls which attended local thunderstorms in southern Indiana.

On the 24th a local storm occurred near Elk Knob, Va., which is described by the cooperative observer at that station, Mr. Henry Nicoll, as follows:

About 11 p. m., November 24, a small tornadic storm passed through Hickory Flats, a section situated about 2 miles from this station. The effect of this disturbance, as shown the following morning, was about as follows: The path of destruction was about 100 feet wide and 2 miles long and extended in a southeasterly direction. Fortunately the storm passed close to but one house—that of Mr. J. H. Graham. This residence was moved about 18 inches off its foundation, but his corncrib and barn were destroyed. Corn shocks in the track of the storm were whirled away, and trees of 15 to 16 inches in diameter were twisted off. Many trees were wrenched off close to the ground. The noise made by the storm was alarming. Lightning accompanied the windstorm, but there was very little precipitation. As far as can be learned, this is the first instance of a tornadic wind in this county.

NOTES.

Extension of the river service in Indiana.—Announcement was made under date of November 21, 1910, of the inauguration of an increased river service for the State of Indiana. Indianapolis was designated as the river-district center, with territory comprising the watershed of the Wabash River, above the mouth of and including the White River.

The special river stations at Elliston, Shoals, and Terre Haute, Ind., have been transferred from the Cairo (Ill.) district, and arrangements have been made for the establishment of similar stations at Attica, Logansport, Bluffton, and Anderson, Ind.; also for the establishment of a special rainfall station at Farmland, Ind. Observations will begin at the new river stations as soon as a river gage at each place is constructed, which will probably be before the end of this year.

Ohio River improvement.—The Government engineering party which has been engaged in taking soundings and making preliminary surveys for the location of locks and dams in the upper Ohio River during the past summer and fall completed their work for Lock No. 33, located near Maysville, Ky., about the middle of November; after which they moved farther down the river and began work in the survey for Lock No. 34.

The locks and dams on the Ohio River from Louisville to Henderson, Ky., have been located as follows: The dam on the falls at Louisville, Ky., No. 41, is practically completed and in working order. Its location is 599 miles below Pittsburg, Pa. No. 42 has been located at a point about a mile below Kosmosdale, Ky., or 623 miles below Pittsburg; No. 43, 1 mile below New Amsterdam, Ind., or 652 miles below Pittsburg; No. 44, not yet located; No. 45, near Addison, Ky., or 700 miles below Pittsburg; No. 46, 3½ miles below Owensboro, Ky., or 748 miles below Pittsburg; No. 47, 1½ miles below Newburg, Ind., or 771 miles below Pittsburg; and No. 48, 1 mile below Henderson, Ky., or 804 miles below Pittsburg.

TABLE 1.—*Climatological data for November, 1910. District No. 3, Ohio Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
New York.																				
Allegany	Cattaraugus	1,441	4	33.4	.....	62	1	20	18	37	2.42	.....	0.43	6.5	19	2	4	24	w.	Charles E. Whitney.
Bolivar	Allegany	1,800	16	34.0	− 2.6	60	2	15	21	34	3.28	+ 0.62	0.57	32.0	19	3	6	21	w.	Lowell Andrus.
Franklinville	Cattaraugus	1,598	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. John W. Kales.
Olean	....do	.....	2	.....	.....	.....	.....	.....	.....	.....	3.86	.....	0.60	21.8	16	3	6	21	w.	John W. Alles.
Pennsylvania.																				
Alleppo	Greene	1,135	9	36.0	.....	66	9	15	20	43	1.80	.....	0.75	2.0	7	4	8	18	nw.	J. S. Hinerman.
Baldwin	Butler	1,404	4	34.6	.....	63	10	20	7	25	2.09	.....	0.42	8.0	12	2	3	25	w.	S. H. Templeton.
Claysville	Washington	1,127	6	36.4	.....	66	9	15	20	43	1.57	.....	0.45	4.0	13	4	5	21	nw.	E. T. Buchanan.
Franklin	Venango	955	36	36.0	− 3.7	62	2	19	21	30	3.11	− 0.12	0.70	6.0	18	2	6	22	w.	F. E. Dixon.
Greenville	Mercer	950	14	35.2	− 3.2	63	1	20	21	32	3.61	+ 0.80	0.76	18.0	11	6	3	21	nw.	A. M. Orr.
Indiana	Indiana	1,350	13	35.8	− 5.7	64	1	20	20	37	2.80	− 0.06	0.70	6.3	11	2	6	22	w.	Rev. J. M. Welch.
Johnston	Cambria	1,184	22	36.8	− 4.8	68	1†	19	20	39	1.96	− 1.24	0.38	8.3	19	3	10	17	nw.	E. C. Lorentz.
Lycippus	Westmoreland	1,420	18	34.8x	− 7.2	60	9	21	20	32x	2.61	+ 0.07	0.75	15.8	15	.....	.....	.....	.....	Murray Forbes.
Pittsburg	Allegheny	842	40	37.1	− 5.5	63	9	24	30	29	1.32	− 1.00	0.52	1.6	17	1	6	23	w.	U. S. Weather Bureau.
Saegerstown	Crawford	1,116	19	34.8	− 3.8	61	1	10	21	33	5.59	+ 2.05	0.98	33.0	21	0	3	27	w.	J. G. Apple.
Skidmore	Lawrence	1,000	6	34.6	.....	64	1	17	20	40	1.10	.....	0.25	3.0	6	6	3	21	sw.	W. H. Stoner.
Somerset	Somerset	2,250	54	32.0	− 6.6	64	1	9	20	40	2.35	− 1.09	0.50	8.2	14	0	11	19	nw.	W. M. Schrock.
Uniontown	Fayette	999	22	37.9	− 5.3	64	1†	23	7	37	2.51	− 0.84	0.98	4.7	13	2	8	20	nw.	Wm. Hunt.
Warren	Warren	1,137	21	34.4	− 4.6	60	1	17	21	31	5.06	+ 1.58	0.80	35.2	17	5	0	25	nw.	Anna Simpson.
Maryland.																				
Deer Park	Garrett	.....	16	31.6	− 6.4	65	1	2	20	45	3.27	+ 0.79	0.65	18.0	12	.....	.....	.....	.....	S. P. Specht.
Grantsville	....do	.....	16	32.3	− 7.3	60	9	10	20	34	3.40	+ 0.84	1.05	20.0	12	.....	.....	.....	.....	J. S. Miller.
Oakland	....do	.....	10	32.2	.....	64	1†	2	23	46	2.94	.....	0.65	15.5	17	2	11	17	w.	R. E. Weber.
West Virginia.																				
Bancroft	Putnam	.....	6	.....	.....	.....	.....	19	20	....	1.59	.....	0.53	T.	6	12	0	18	ne.	James Hill.
Beckley	Raleigh	2,440	11	35.8	− 6.5	68	10	14	19	43	2.25	− 0.14	1.00	2.0	5	13	1	16	w.	John A. Ewart.
Bens Run	Pleasants	622	9	37.8	.....	68	9	19	20	41	2.24	.....	0.97	3.0	8	12	7	11	.....	J. D Riggs.
Bluefield	Mercer	2,563	15	39.4	− 5.0	68	2	20	12†	39	1.80	− 0.68	0.75	T.	6	17	5	8	.....	Norfolk & Western Ry.
Buckhannon	Upshur	1,472	20	36.6	− 4.2	65	1†	15	20	43	1.89	− 1.77	0.40	1.5	8	8	2	20	.....	H. A. Darnall.
Cairo	Ritchie	667	8	38.2	− 5.0	65	1	15	20†	44	1.73	− 1.22	0.60	0.5	11	0	11	19	w.	Van A. Zevely.
Central Station	Doddridge	900	11	.....	.....	69	9	11	20	50x	2.21	− 0.47	.....	.....	.....	.....	.....	.....	.....	G. W. Sherwood.
Charleston	Kanawha	598	24	43.2	.....	71	1	22	20	40	2.13	− 0.83	0.93	T.	8	8	4	18	w.	R. C. Hewes.
Creston	Wirt	612	10	37.5	.....	68	9	16	20	44	1.97	− 0.34	0.32	T.	9	8	3	19	w.	J. M. Reed.
Cuba	Jackson	544	9	37.2	.....	68	1	13	20	42	1.40	− 0.72	0.51	0.2	8	7	9	14	nw.	C. T. Perry.
Elkhorn	McDowell	1,933	18	39.0	− 7.0	67	8	20	17†	40	1.90	− 0.88	0.70	1.5	9	12	2	16	sw.	J. J. Lincoln.
Elkins	Randolph	1,940	11	34.6	− 5.0	67	9	15	23	45	2.26	− 0.60	0.94	4.3	15	4	4	22	w.	U. S. Weather Bureau.
Fairmont	Marion	879	18	38.0	.....	70	9	16	20	47	2.30	− 0.70	0.70	T.	9	.....	.....	.....	.....	H. Glenn Fleming.
Glenville	Gilmer	738	22	38.6	− 4.6	69	9	15	20	45	2.31	− 0.81	0.58	T.	7	8	4	18	nw.	John Holt.
Grafton	Taylor	985	18	37.0	− 6.0	68	9	12	20	44	3.57	+ 0.49	1.50	3.0	11	8	7	15	.....	John W. Snider.
Green Sulphur Springs	Summers	1,600	14	36.9	− 6.3	70	9	14	20	48	1.76	− 0.33	0.61	0.8	11	9	5	16	w.	John W. Dalton.
Hinton	....do	1,400	21	38.3	− 6.9	74	9	21	20†	48	1.20	− 1.13	0.62	T.	7	13	5	12	w.	J. B. Lavender, C. E.
Huntington	Cabell	510	15	38.9	− 4.5	70	9	20	20	43	1.90	− 1.05	1.06	T.	7	11	1	18	w.	L. H. Hutchinson.
Lewisburg	Greenbrier	2,200	10	36.0	− 5.4	63	8	15	20	43	1.53	− 1.19	0.80	T.	5	15a	3a	11a	nw.	Geo. T. Atgabrite.
Logan	Logan	665	8	43.0	.....	75	9	23	19	43	2.45	.....	1.20	T.	8	7	16	7	w.	H. C. Ragland.
Lost Creek	Harrison	1,033	14	36.2	− 6.0	69	9	12	20	49	1.84	− 0.75	1.03	1.5	9	8	3	19	w.	Allen Smith.
Madison	Boone	704	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.5	.....	.....	.....	.....	.....	S. E. Bradley.
Manninton	Marion	967	7	36.6	.....	68	9	14	20	47	2.53	.....	1.27	2.9	14	5	6	19	w.	Jas. A. Morgan.
Marlinton	Pocahontas	2,169	11	32.0f	− 6.6	55	9	13	20	35f	1.14	− 1.90	0.49	T.	4	13f	0f	11f	.....	C. J. McCarty.
Morgantown	Monongalia	1,250	36	37.4	− 5.8	66	9	18	20	38	2.24	− 0.89	1.00	7.0	11	9	14	7	w.	Horace Atwood.
Moundsville	Marshall	640	8	38.9d	.....	68	9	19	20	42d	1.16	.....	0.47	T.	8	4	4	18	sw.	J. E. Matthews.
New Cumberland	Hancock	987	10	36.0	− 4.6	64	9	14	20	40	1.30	− 0.53	0.40	2.0	7	4	2	24	w.	Frank S. Evans.
New Martinsville	Wetzel	634	17	38.4	− 6.0	66	1	20	20	35	1.44	− 1.35	0.90	T.	5	11	2	17	n.	Wm. Ankron.
Nuttallburg	Fayette	2,252	18	36.5h	− 8.3	60	9	18	20	32h	0.92	− 1.66	0.36	1.6	10	9a	4a	12a	.....	Stephen Tully.
Parkersburg	Wood	638	22	38.7	− 4.4	69	9	21	20	39	1.64	− 1.19	0.84	0.3	9	2	5	23	w.	U. S. Weather Bureau.
Parsons	Tucker	1,662	11	34.6	− 7.0	67	1†	12	20	49	2.35	+ 0.01	0.95	7.0	6	6	10	14	.....	J. W. Swisher.
Philippi	Barbour	1,192	18	37.4	− 6.0	69	9	11	21	49	2.98	− 0.08	1.32	3.8	14	3	12	15	w.	J. D. Dadisman.
Pickens	Randolph	2,785	20	33.6	− 6.9	70	9	12	23	45	4.41	+ 0.95	1.12	15.0	13	7	15	8	w.	Dr. J. L. Cunningham.
Pineville	Wyoming	.....	2	42.6	.....	73	17	21	30	40	3.59	.....	1.81	0.2	5	13	11	6	.....	W. V. Senter.
Point Pleasant	Mason	553	21	39.8	− 5.3	71	9	15	20	45	1.93	− 1.01	0.70	T.	10	8	2	20	nw.	W. D. Holmes.
Powellton	Fayette	904	14	39.3	− 5.0	70	9	19	20	44	2.44	− 0.09	0.64	1.0	12	7	12	11	.....	Dr. A. W. DeBell.
Princeton	Mercer	2,469	10	35.0	.....	60	9	12	20	39	2.10	− 2.00	1.25	2.0	14	10	7	13	w.	H. Scott.
Robertsburg	Putnam	.....	1	38.1	.....	74	1	14	20	45	1.62	.....	0.65	T.	6	8	0	22	w.	E. P. Turley.
Ryan	Roane	639	7	37.1	.....	70	9	12	22	40	1.61	.....	0.50	1.5	9	10	3	17	.....	Wm. E. Ryan.
Smithfield	Wetzel	.....	6	35.8	.....	61	9	18	20	32	2.75	.....	0.50	1.5	11	6	8	16	nw.	G. M. Whisler.
Spencer	Roane	710	7	36.4	.....	75	9	10	20	55	1.78	− 0.49	0.47	0.0	7	1	15	14	.....	A. M. McKown.
Sutton	Braxton	.....	5	36.8	.....	74	1	16	22	40	2.46	.....	0.50	4.0	8	16	3	11	.....	J. E. Baughman.
Terra Alta	Preston	3,207	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. F. Dodge.
Union	Monroe	.....	7	35.0	.....	65	9	11	21	40	0.66	.....	0.42	0.0	3	.....	.....	.....	.....	Shelton Clark.
Valley Fork	Clay	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Blanche Pierson.
Webster Springs	Webster	1,500	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. H. Hamrick.
Wellsburg	Brooke	1,225	10	35.3	− 5.6	62	9	20	14†	34	2.23	+ 0.15	0.50	0.4	12	1	9	20	w.	C. P. Waugh.
Weston	Lewis	824	21	34.8a	.....	64	1	16	16†	44a	2.24	− 1.29	0.50	3.0	14	5	4	21	w.	Miss C. M. Davis.
Wheeling	Ohio	645	26	36.2	.....	68	9	10	20	41	1.03	− 1.54	0.28	0.6	12	5	5	20	w.	Miss M. B. Forsyth.
Williamson	Mingo	660	10	41.5	− 4.7	74	9	22	17	44	2.40	− 0.49	1.68	0.0	8	10	6	14	e.	J. F. Keyser.
Ohio.																				
Amesville	Athens	630	6	37.2	.....	70	9	12	20	49	1.60	.....	0.46	0.5	10	7	6	17	nw.	F. W. Gibson.
Bangorville	Richland	1,380	23	34.8	− 4.6	65	9	20	7	36	1.87	− 1.19	0.61	4.4	9	5	8	17	nw.	S. M. Painter.
Bellefontaine	Logan	1,276	16	34.4	− 6.3	64	9	17	19	34	1.91	− 1.02	0.61	2.0	9	7	3	20	w.	Cory L. Lane.
Bladensburg	Knox	1,100	19	34.1	− 4.8	67	9	12	20	46	1.25	− 1.04	0.40	5.0	7	3	10	17	w.	Miss Mary Elliott.
Cadiz	Harrison	1,245	7	35.2	.....	63	1†	20	7	35	1.75	.....	0.34	8.9	14	5	5	20	w.	Harry B. McConnell.
Cambridge	Guernsey	803	18	36.2	− 3.2	69	9	16	20	45	1.25	− 1.08	0.33	1.0	6	5	9	16	.....	Samuel Mehaffey.
Camp Dennison	Hamilton	570	17	38.3	− 4.6	68	9	16	20	40	1.74	− 1.04	1.25	0.1	7	11	10	9	w.	Henry F. Pinkvoss.
Canal Dover	Tuscarawas	884	17	35.5	− 4.3	64	9	15	20	39	1.17	− 1.42	0.30	T.	10	3	11	16	w.	Ed. S. Slingluff.
Canton	Stark	1,065	27	38.0	− 1.9	68	1	25	6†	31	1.90	− 0.72	0.49	3.8	13	6	4	20	w.	Prof. C. F. Stokes.
Cardington	Morrow	1,010	15	36.8	− 2.6	70	9†	19	20	36	1.37	− 1.09	0.40	3.2	6	9	1	20	nw.	Ansel E. Salisbury.
Chillicothe	Ross	630	.....	.....	.....	.....	.....	.....	.....	.....	1.22	.....	.....	.....	.....	.....	.....	.....	.....	Owen L. Brown.
Cincinnati	Hamilton	628	39	40.2	− 4.4	70	9	23	30	35	1.35	− 1.86	1.06	0.1	6	8	8	14	w.	U. S. Weather Bureau.
Circleville	Pickaway	694	22	37.4	− 5.0	68	9	19	20	39	0.92	− 1.72	0.46	T.	8	6	5	19	nw.	Hon. S. W. Courtright.
Clarington	Monroe	600	7	38.9	.....	68	9	17	20	44	1.72	.....	0.85	0.1	11	5	2	23	sw.	Col. S. Tschappat.
Columbus	Franklin	918	32	37.0	− 4.4	66	9	23	30	30	0.79	− 2.32	0.30	0.6	7	5	5	20	w.	U. S. Weather Bureau.
Coshocton	Coshocton	770	1	.....	.....	.....	.....	.....	.....	.....	1.53	.....	0.48	.....	7	.....	.....	.....	.....	Mrs. Ada Jeffries.
Dayton	Montgomery	790	29	37.6	− 4.5	68	9	18	20	34	0.96	− 2.04	0.35	0.2	8	9	8	13	w.	Mrs. Edith L. Boyer.
Delaware	Delaware	927	13	36.0	− 4.3	68	9	16	20	41	1.22	− 1.27	0.55	0.6	9	7	4	19	sw.	Prof. L. L. Hudson.
Demos	Belmont	1,325	22	36.4	− 4.9	72	1	17	20	42	1.55	− 0.88	0.42	3.4	10	4	9	17	sw.	J. T. Dysart.
Dennison	Tuscarawas	908	....	36.4	.....	66	1	15	20	39	1.60	.....	0.41	1.2	13	7	7	16	w.	Water Supply Co.
Frankfort	Ross	750	18	38.8	− 3.6	68	10	15	20	39	1.24	− 1.22	0.70	T.	3	13	5	12	w.	O. A. Cory.
Garrettsville	Portage	1,005	26	34.0	− 4.6	63	1	11	20	36	3.13	+ 0.11	0.79	16.7	14	2	3	25	nw.	S. M. Luther.
Granville	Licking	960	28	35.6	− 4.4	67	9	16	20	40	1.46	− 1.71	0.39	0.5	10	7	3	20	w.	Dr. L. E. Davis.

TABLE 1.—*Climatological data for November, 1910. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure rom the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Ohio—Continued.																				
Gratiot	Licping	1,000	21	35.5	— 5.5	66	9	16	20	41	0.97	— 1.77	0.18	1.5	11	6	7	17	w.	W. B. Longstreth.
Green	Adams	500	17	39.5	— 4.7	68	9	19	20	38	1.42	— 1.57	0.70	T.	4	12	10	8	nw.	W. F. Kenyon.
Green Hill	Columbiana	1,135	18	33.4	— 5.2	63	1	13	20	40	1.45	— 0.75	0.30	4.9	11	6	10	14	nw.	Jos. E. Bentley.
Greenville	Darke	1,060	24	36.0	— 4.3	67	9	19	30	34	2.00	— 1.23	0.62	T.	7	8	10	12	w.	G. A. Katzenberger.
Hillsboro	Highland	1,063	31	37.6	— 4.6	68	1†	21	20	37	2.59	— 0.54	1.71	T.	4	4	11	15	nw.	Carey H. Roush.
Ironton	Lawrence	575	27	41.0	— 3.0	72	9	17	20	46	1.74	— 1.02	0.76	T.	7	12	5	13	sw.	James Bull.
Jacksonburg	Butler	975	42	37.2	— 4.2	68	9	19	30	36	1.38	— 1.75	0.80	0.2	6	8	7	15	nw.	Dr. J. B. Owsley.
Kenton	Hardin	1,015	18	33.8	— 6.4	64	9	15	20	35	2.52	— 0.96	0.94	T.	6	8	4	18	w.	N. S. Martin.
Killbuck	Holmes	1,087	18																	Geo. W. Nowels.
Lancaster	Fairfield	898	15	38.2	— 4.0	67	9	20	20	35	1.36	— 1.37	0.60	1.0	6	10	3	17	nw.	R. L. Renshaw.
Latshe	Adams	900	7																	Miss Ruth Hoffman.
McConnelsville	Morgan	710	26	36.6	— 5.4	68	9	14	20	44	1.78	— 1.06	0.49	1.0	12	5	6	19	nw.	C. H. Morris.
Marietta	Washington	627	90	39.2	— 3.5	66	9	18	20	36	1.79	— 1.20	0.72	T.	11	6	5	19	w.	Prof. T. D. Biscoe.
Marion	Marion	980	32	36.4	— 4.0	66	1	17	20	35	2.44		0.75	3.9	9	2	9	19	w.	Dr. E. H. Raffensperger.
Milfordton	Knox	1,200	18	35.4	— 3.4	67	2	16	20	41	1.68	— 0.64	0.54	2.0	7	7	8	15	nw.	L. H. Burgess.
Millican	Perry	875	17	36.0	— 5.0	68	9	12	20	44	0.95	— 1.29	0.23	1.5	7	6	7	17	nw.	V. C. Eveland.
Millport	Columbiana	1,145	18	34.1	— 5.0	63	1	14	20	40	1.23	— 1.13	0.24	2.6	11	1	8	21	nw.	G. F. Copeland.
Nellie	Coshocton	850	10	35.0	— 5.1	68	9	15	20	43	0.53	— 2.03	0.48	T.	2	10	4	16	w.	Miss Ethel L. Gamertsfelder.
New Alexander	Jefferson	1,050	25	39.0	— 2.2	68	2	19	19	28	1.40	— 1.34	0.75	2.0	4	7	4	19	w.	Mrs. Mary K. Pennell.
New Berlin	Stark	1,100	18	35.8	— 3.5	62	1	18	19	31	2.88	+ 0.57	0.59	11.7	12	4	1	25	w.	Clayton Holl.
New Waterford	Columbiana	1,053	16	34.4	— 5.0	60	1†	15	20	36	2.88	+ 0.15		14.0		4	6	20	sw.	Sam. C. Scott.
Ohio State University	Franklin	757	27	36.6	— 3.8	67	9	14	20	36	1.07	— 1.63	0.37	0.6	7	5	10	15	w.	Prof. H. C. Lord.
Pataskala	Licking	997	18	35.6	— 4.9	67	9	19	7†	41	1.23	— 1.72	0.31	1.2	11	3	13	14	w.	J. N. Ridenour.
Philo (1)	Muskingum	1,018	15	36.5	— 6.5	67	9	18	20	37	0.96	— 1.24	0.24	0.7	7	8	5	17	nw.	L. C. Burckholter.
Piqua	Miami	847	2								1.94		0.68	0.0	.6	3	8	19	se.	Harry L. Roberts.
Plattsburg	Clarke	1,130	17	36.2	— 4.9	66	9	19	7†	29	1.34	— 1.57	0.52	2.0	6	10	6	14	w.	F. E. Stewart.
Pomeroy	Meigs	781	26																	
Portsmouth	Scioto	527	79	39.1	— 5.6	69	1	17	20	39	1.57	— 1.39	1.23	T.	6	10	0	20	w.	Dr. H. A. Scherrmann.
Prospect	Marion	909									1.65		0.90		5					Neil J. Gast.
Rittman	Wayne	990	18	35.5	— 4.3	63	1†	22	7	38	2.14	— 0.69	0.62	3.0	10	3	5	22	n.	J. B. Gish.
Shenandoah	Richland	1,100	18	34.2	— 4.6	66	9	18	20	37	2.26	— 0.08	0.78	3.7	12	1	14	15	w.	T. B. Arnett.
Sidney	Shelby	985	27	36.0	— 4.5	67	9	19	20	34	1.95	— 1.30	0.92	1.8	7	10	0	20	nw.	Hamline B. Blake.
Somerset	Perry	1,080	11	35.5	— 7.7	66	9	20	7†	35	0.82	— 1.75	0.28	1.0	6	8	5	17	w.	Miss M. V. C. Sheridan.
Springfield	Clarke	1,002	16								1.11	— 1.80	0.47	0.7	9	5	12	13	w.	W. A. Webster.
Summerfield	Noble	1,187	4	36.1		67	9	14	20	44	1.50		0.38	1.0	10	5	10	15	w.	H. R. McClintock.
Thurman	Gallia	696	17	42.6	— 1.4	71	1†	24	30	26	1.42	— 1.12	0.72	T.	2	6	5	19	w.	D. D. Thomas.
Urbana	Champaign	1,031	40	35.8	— 4.2	67	9	17	19†	37	1.20	— 1.71	0.50	0.8	7	8	9	13	nw.	Prof. J. H. Williams.
Warren	Trumbull	900	21	35.0	— 5.3	65	1	19	20	32a	3.41	+ 0.93	0.64	19.3	16	4	3	23	nw.	M. D. McCorkle.
Waverly	Pike	590	27	40.8	— 2.0	78	1	14	20	43	2.44	— 0.40	0.95	1.2	6	11	5	14	n.	Herrmann A. Lorbach.
Waynesville	Warren	700	25	37.4	— 4.4	68	9	21	20†	36	0.89	— 2.26	0.56	T.	3	9	6	15	w.	Charles Michener.
Wooster	Wayne	1,030	30	34.8	— 5.0	66	9	14	20	41	2.36	— 0.38	0.73	4.5	15	0	5	25	nw.	Experiment Station.
Youngstown	Mahoning	846	18								2.21	— 0.51	0.40	8.0	10	13	1	16	w.	G. R. Patton.
Zanesville	Muskingum	700	23								0.83	— 1.71	0.26	0.2	8	6	1	23	w.	S. G. Sprague.
Virginia.																				
Big Stone Gap	Wise	1,540	19	40.0	— 3.9	66	9	18	13	38	2.27	— 1.44	0.70	T.	6	11	7	12	n.	John W. Fox, sr.
Blacksburg	Montgomery	2,170	19	37.2	— 5.1	68	9	15	20	46	0.75	— 1.57	0.34	T.	5	9	10	11	w.	Agricultural Exp. Station.
Burkes Garden	Tazewell	3,250	15	35.4	— 5.0	61	9	7	20	45	2.04	— 1.20	0.75	T.	4	11	5	14	w.	C. H. Greever.
Elk Knob	Lee	3,243	7	40.5		66	10	19	12	26	2.05		0.82	0.5	11	16	4	10	nw.	Henry Nicoll.
Galax	Grayson	2,300		39.8		62	1†	19	21	37	0.83		0.40	T.	4	17	1	12	nw.	E. C. Williams.
Ivanhoe	Wythe	2,028	6	37.7		60	9	19	21	31	1.24		0.44	T.	9	14	11	5	w.	Miss Alice G. Jewett.
Lebanon	Russell	2,131		38.1		67	9	13	20	44	3.49		1.30	T.	7	18	2	10	nw.	R. W. Swain.
Marion	Smyth	2,224	15	37.6	— 6.3	66	9	17	17	43	2.93	+ 0.53	1.60	T.	4	15	6	9	sw.	S. W'n State Hospital.
Max Meadows	Wythe	2,028	14																	James M. Graham.
Mendota	Washington	1,350	1																	Frank M. Baker.
Radford	Montgomery	1,773	1								1.20		0.56		3					Arthur Roberts.
Spears Ferry	Scott	1,221	14								3.00	— 0.47	1.50	0.0	8					Mrs. L. E. Venable.
Wytheville	Wythe	2,293	17	37.8	— 5.2	66	9	18	20	36	0.93	— 2.11	0.51	T.	7	14	5	11	w.	U. S. Weather Bureau.
North Carolina.																				
Altapass	Mitchell	2,629									0.20		0.10	0.0	4				se.	C. C. & O. Railway.
Andrews	Cherokee	1,800		43.3		71	8†	19	20	48	1.74		1.23	0.0	7	13	12	5	sw.	J. D. Link.
Asheville	Buncombe	2,250	31	41.4	— 3.7	68	14	20	30	36	0.35	— 2.95	0.24	T.	8	17	8	5	nw.	U. S. Weather Bureau.
Banners Elk	Watauga	3,750	2	35.0		62	9	13	20	41	1.39		0.50	0.0	6	19	3	8	w.	T. L. Lowe.
Brevard	Transylvania	2,230	9	41.4		69	2†	16	13	46	0.32		0.32	0.0	1	22	8	0	n.	W. E. Breese.
Bryson City	Swain	2,000	22								1.95	— 1.50	0.80	0.0	7					D. K. Collins.
Cullowhee	Jackson	2,100		42.4		72	9	16	13†	49	1.10		0.79	T.	6	17	5	8	nw.	F. H. Brown.
Hendersonville	Henderson	2,167	14																	T. W. Valentine.
Highlands	Macon	3,670	20	40.0	— 2.1	62	24	17	4†	35	0.00	— 5.59	0.00	0.0	0	18	11	1	nw.	T. G. Harbison.
Hot Springs	Madison	1,326	12	44.1	— 5.7	76	9	19	13	42	1.61		0.81	T.	7	15	8	7	w.	P. A. Garner.
Jefferson	Ashe	2,800	3	39.8		68	9	15	20	39	1.26		0.65	T.	4	10	3	17	w.	E. J. Johnson.
Marshall	Madison	1,646	9	42.6		73	9	18	19	47	2.19		1.51	0.3	5					W. E. Finley.
Murphy	Cherokee	1,614	34								1.50	— 2.83	0.60	T.	4					Miss J. Campbell.
Rock House	Macon	3,100	18	43.0	— 3.6	64	14†	18	12	33	0.83	— 3.96	0.65	T.	4	17	13	0	nw.	B. C. Hawkins.
Waynesville	Haywood	2,756	16	40.9	— 4.8	67	1	15	12	46	1.04	— 1.45	0.78	0.0	8	18	4	8	sw.	J. C. L. Gudger.
Georgia.																				
Diamond	Gilmer	2,020	20	45.6	— 2.9	70	26	22	7	30	1.22	— 2.81	0.94	0.0	5	15	7	8		R. A. Kimzey.
Lafayette	Walker	841	4	45.2		69	23	22	7	38	1.37		0.97	0.0	3	16	6	8	nw.	Ralph A. Snow.
Alabama.																				
Bridgeport	Jackson	660	10								1.26	— 2.10	0.90	0.0	5	18	0	12	n.	R. L. Moore.
Decatur	Morgan	573	28	47.4	— 3.5	73	8†	26	4	44	2.07	— 1.30	1.32	0.0	7	15	3	12	n.	Ernest A. Carriger.
Florence	Lauderdale	563	26								1.62	— 1.48	0.70	0.0	4	16	2	12	w.	Robt. E. Coburn.
Guntersville	Marshall	580	5	46.2		82	25	22	4†	39	0.67		0.34	0.0	5	12	6	12	n.	L. S. Long.
Madison	Madison	573	16	47.4	— 4.4	78	26	23	4	40	2.04	— 1.04	1.30	0.0	3	19	11	0	nw.	Albert Klish.
Riverton	Colbert	360	13	46.9	— 3.5	79	28	22	20	43	2.24	— 1.19	1.74	0.0	3	15	3	12	e.	Ernie J. Moore.
Scottsboro	Jackson	652	27	46.4	— 3.9	74	24	22	4	43a	1.74	— 1.90	1.37	0.0	3	11	6	13	nw.	Miss Irene Caldwell.
Tuscumbia	Colbert	488	28	46.0	— 5.3	72	24†	27	4†	40	0.96	— 2.27	0.61	0.0	3	14	4	12	nw.	Samuel Moore.
Tennessee.																				
Ashwood	Maury	725	31	46.4	— 2.3	74	26	22	4	40	0.80	— 3.11	0.60	0.0	2	11	5	14	s.	Mrs. J. W. Fleming.
Benton	Polk	880	25	43.8	— 5.2	73	27	20	18	44	2.07	— 1.04	0.82	0.0	7	14	11	5	n.	G. L. Williams.
Birds Bridge	Greene		4								1.43		0.87	0.0	8	15	1	14	w.	D. B. George.
Bluff City	Sullivan		13								1.66	— 0.93	0.86	T.	6	14	2	14		J. W. Fisher.
Byrdstown	Pickett	1,026	17	43.9	— 3.3	68	24	21	12	32	1.50	— 2.61	0.50	0.0	4	9	14	7	w.	John Lacy.
Carthage	Smith	500	26	45.4	— 2.6	80	27	20	12	46	1.46	— 2.49	0.90	0.0	5	15	2	13	nw.	E. C. Pickering.
Cedar Hill	Robertson	625	10																	J. F. Ruffin.
Celina	Clay	494	7								2.31		1.20	0.0	8	17	1	12	n.	S. B. Anderson.
Center Point	Chester		13								2.16		1.32	0.1	4	17	2	11	s.	H. H. Bailey.
Charleston	Bradley		13								0.31		0.15	0.0	5	17	4	9	n.	J. T. Weeks.
Chattanooga	Hamilton	808	31	47.2	— 3.1	70	9	27	30	31	1.54	— 2.04	1.12	0.0	6	14	8	8	nw.	U. S. Weather Bureau.
Clarksville	Montgomery	520	47	44.4	— 3.5	73	27	23	12	38	0.89	— 3.43	0.56	0.0	7	15	14	1	n.	Prof. Jas. A. Lyon.

TABLE 1.—*Climatological data for November, 1910. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days. .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Tennessee—Continued.																				
Clinton	Anderson		22								1.27	− 2.11	0.65	T.	10	13	0	17	sw.	John Thompson.
Dandridge	Jefferson		6								1.50		0.90	0.0	5	22	0	8	w.	J. E. Swann.
Decatur	Meigs	850	14	43.5	− 5.1	73	14	19	4†	44	1.16	− 2.50	0.55	0.0	9	16	7	7	sw.	J. W. Lillard.
Dickson	Dickson	800	14	44.4	− 3.0	72	8†	20	12	38	0.00	− 4.30	0.00	0.0	....	19	10	1	n.	N. R. Sugg.
Dover	Stewart		15	45.0	− 2.7	74	8†	21	12†	43	T.	− 5.09	T.	0.0	0	13	9	8	s.	A. M. Tippit.
Dunlap	Seaquatchee	726	1	45.0		74	8†	19	12	46	1.50		0.56	0.0	7	13	11	6		S. B. Boyd.
Elizabethton	Carter	1,575	20								1.40	− 0.90	0.50	0.0	6	14	4	12	w.	Chas. Boyd.
Erasmus	Cumberland	1,850	13	40.5	− 3.9	71	9	12	13	44	1.63	− 2.29	0.90	T.	8	14	8	8	sw.	Mrs. E. D. Ashley.
Florence	Rutherford	500	28	44.2	− 4.2	69	27	21	4†	35	1.66	− 2.01	0.75	T.	5	19	2	9	n.	Erastus P. Bell.
Franklin	Williamson	655	20	43.4	− 4.5	71	27	23	4†	37	1.23	− 2.45	1.00	0.0	4	14	7	9		J. L. Parkes, jr.
Halls Hill	Rutherford		8								1.89		0.73		4	16	0	14	n.	Ed. F. Wright.
Harriman	Roane	841	15	43.4	− 3.9	68	9†	21	7	39	1.24	− 2.43	0.55	0.0	5	13	13	4		Robert R. Ayers.
Hohenwald	Lewis	983	24	46.2[1]	− 1.6	72	8†	20	4	40[1]	2.60	− 1.54	1.05	0.0	4	10[h]	9[h]	3[h]	nw.	John Lutzelman.
Iron City	Lawrence		13	45.4	− 4.1	71	26	22	4	40	1.45	− 2.31	0.62	0.0	6	10	16	4	nw.	Capt. H. P. Seavy.
Jefferson City	Jefferson										1.12		0.74	T.	7	13	7	10		C. Calvin Maddox.
Johnson City	Washington										1.28		0.73	T.	8	14	8	8	w.	Ward Crosby.
Johnsonville	Humphreys	364	14	44.4	− 4.6	72	26	17	6	40	0.80	− 3.80	0.29	0.0	6	15	4	11	w.	Miss Sallie B. Matthews.
Jonesboro	Washington	1,740	15																	Robert A. Lovegrove.
Kingston	Roane		19								1.05	− 2.30	0.25	0.0	7	17	0	13	n.	H. Crumbliss.
Knoxville	Knox	977	39	43.6	− 3.5	68	9	26	20	34	0.97	− 2.63	0.60	0.0	7	13	8	9	w.	U. S. Weather Bureau.
Lebanon	Wilson	522	1	45.2		70	9	20	12	35	1.35		0.55	0.0	7	15	5	10	n.	Logan Fields.
Lewisburg	Marshall	727	15	45.8	− 3.4	75	8	20	4†	44	1.08	− 2.19	0.69	0.0	4	18	5	7	s.	Dr. R. D. Crutcher.
Livingston	Overton			43.9		71	9	18	12	38	3.46		1.50	0.0	4	12	4	14	w.	E. C. Knight.
Loudon	Loudon	816	7								1.17	− 2.16	0.64	0.0	6	17	4	9	w.	Robert W. Clark.
Lynnville	Giles	770	22	45.2	− 3.4	70	10	21	4	40	1.56	− 1.91	0.98	0.0	4	15	9	6	n.	Col. J. H. Burrow.
McGhee	Monroe		6								1.56		1.00	0.0	7	21	0	9	e.	Alice L. Hendricks.
McMinnville	Warren	1,011	26	44.2	− 4.0	70	8†	21	4	39	1.49	− 2.26	0.60	0.1	8	12	8	10	n.	J. T. Sparkman.
Maryville	Blount	1,050	14	44.2	− 4.0	70	9	21	13	38	1.38	− 2.05	0.74	0.0	8	13	10	7	w.	Mrs. F. E. Benedict.
Mountain City	Johnson	2,486	13	38.2	− 4.1	70	9	13	20	48	2.17	− 0.34	0.65	0.0	6	16	12	2		E. E. Barry.
Nashville	Davidson	654	39	45.9	− 2.8	70	27	26	30	32	1.17	− 2.68	0.86	T.	9	15	6	9	nw.	U. S. Weather Bureau.
Newport	Cocke	1,280	20	42.4	− 3.9	65	24†	21	20	33	2.10	− 0.80	1.00	0.0	4	20	7	3	w.	Dr. C. T. Burnett.
New River	Scott	1,215	3								1.70		0.80	0.0	3	26	0	4	w.	Burl W. Buttram.
Palmetto	Bedford	770	17	45.7	− 4.3	72	8	21	20	39	1.29	− 1.79	0.78	0.0	5	16	8	6	n.	Mrs. Ross Woods.
Pinewood	Hickman		3	44.6		76	8	18	3†	49	1.42		0.68	0.0	4	15	7	8	n.	Miss Carrie Cash.
Pope	Perry		13																	Miss Bessie Howard.
Rogersville	Hawkins	1,150	25	40.9	− 5.3	70	9	17	13	44	1.13	− 1.88	0.86	0.0	8	15	7	8	w.	Fred. Beal.
Rugby	Morgan	1,410	22	41.8	− 3.2	72	9	17	12	47	2.24	− 1.47	0.75	0.0	6	12	7	11	n.	S. G. Wilson.
Savannah	Hardin	442	26	46.6	− 2.9	73	27	23	4	37	2.00	− 1.84		0.0	2					W. F. Bell.
Sevierville	Sevier		4	41.3		75	27	17	12†	42	1.60		0.90	0.0	9	11	7	12	sw.	H. O. Eckel.
Sewanee	Franklin	2,000	14	42.4	− 5.6	65	8†	20	30	33	1.05	− 2.95	0.67	T.	3	14	3	13	nw.	University of the South.
Sparta	White	920	4			75[d]	9				1.13		0.75	0.0	5	10[e]	7[e]	8[e]	w.	E. H. Hull.
Springdale	Claiborne	1,058	20																	Mrs. Lucy E. Breeding.
Springville	Henry	377	7	43.8		74	27	20	18†	41	0.82		0.29	T.	9	18	8	4	n.	H. A. Boden.
Tazewell	Claiborne		13								1.49	− 2.01	0.85	0.0	5	17	2	11	n.	J. C. Carr.
Tullahoma	Coffee	1,075	22	42.8	− 4.4	69	14	22	4†	37	1.34	− 2.25	0.88	T.	6	13	15	2	n.	R. T. Moore.
Walling	White	909	7								1.76		0.65	0.0	6	14	5	11		J. K. Roberts.
Waynesboro	Wayne	753	24	45.4	− 2.9	72	26	22	4	38	2.18	− 1.43	0.84	0.1	7	13	10	7	n.	H. C. Boyd.
Wildersville	Henderson		13	45.4	− 4.2	73	26†	22	5	38	1.44	− 2.86	0.75	T.	3	13	12	5	n.	W. R. Wilson.
Worsham	Sumner		9								2.23		1.45	0.0	6	14	6	10	w.	J. G. Elizer.
Yukon	Lincoln	850	13								1.69	− 2.19	1.24	0.0	4					W. P. Watson.
Kentucky.																				
Alpha	Clinton		16	45.9	− 3.1	70	24	21	20	38	2.20	− 1.86	1.80	0.0	3	20	2	8	n.	W. W. Hicks.
Anchorage	Jefferson	700	9	38.4	− 5.7	69	9	16	17†	37	2.99	+ 0.06	2.25	T.	6	14	6	10	nw.	C. E. Barrett.
Bardstown	Nelson	637	14	42.6	− 4.2	71	9	18	12	39	1.66	− 1.72	1.10	0.0	5	15	0	15	sw.	G. M. Talbott.
Beattyville	Lee	650	7	38.4		74	1†	14	20	49	3.84		1.74	T.	10	14	5	11	nw.	G. W. Cann.
Beaver Dam	Ohio	441	7	41.8		72	9	18	12	44	1.51		1.05	0.0	3	16	0	14	n.	T. S. Woodward.
Berea	Madison	1,070	9	40.2	− 6.5	69	9	16	20	38	2.67	− 0.13	1.30	0.0	5	19	3	8	sw.	C. F. Rumold.
Bowling Green	Warren	500	21	42.8	− 4.1	71	9†	20	12	37	1.19	− 2.87	0.67	0.0	4	16	1	13	n.	Mrs. L. G. Causey.
Burnside	Pulaski	773	20								1.74	− 1.93	1.10	0.0	8	17	3	10	s.	G. M. Estes.
Cadiz	Trigg		8																	F. T. Street.
Calhoun	McLean	397	7	44.0		73	9	21	18	38	1.22		0.58	0.0	4	12	11	7	nw.	W. A. Taylor.
Catlettsburg	Boyd	544	17								1.91	− 2.23	0.96	T.	8	13	3	14	w.	Mrs. Mertle M. Bruns.
Earlington	Hopkins	370	21	42.0	− 5.7	72	9	19	12	40	2.80	− 1.58	1.61	0.0	4	20	1	9	n.	J. B. Atkinson.
Edmonton	Metcalfe	600	19	42.2	− 4.6	69	9	16	12	41	1.22	− 2.68	0.50	0.0	6	15	10	5	w.	Miss Lee Ray.
Eubank	Pulaski	1,177	16	40.6	− 4.1	69	9	18	20	36	4.29	+ 1.17	3.77	0.0	6	12	7	11	w.	W. H. Henderson.
Falmouth	Pendleton	530	21								1.64	− 1.98	0.94	0.0	6	15	3	12	w.	J. V. Oldham.
Farmers	Rowan	668	5	39.7		73	9	13	20	48	1.92		0.85	T.	6	10	9	11	w.	Miss Gertrude Sorrell.
Frankfort	Franklin	560	20	39.5	− 7.0	65	1†	19	17	34	1.76	− 1.65	0.54	0.0	6	16	7	5	sw.	J. H. Roberts.
Franklin	Simpson	691	17	44.6	− 3.6	72	9	22	4†	37	1.03	− 2.93	0.31	0.0	5	7	20	3	nw.	J. E. Newman.
Greensburg	Green	581	18	39.6	− 5.2	69	24	14	12†	45[a]	2.83	− 0.85	2.09	T.	7	22	0	8	n.	L. C. Alcorn.
High Bridge	Jessamine	762	8								2.68		2.20	0.0	7	13	4	13		Miss Lulu Wood.
Hopkinsville	Christian	524	14	43.6	− 4.5	70	9†	20	12	37	1.09	− 3.39	0.70	0.0	4	20	1	9	w.	W. F. Randle.
Irvington	Breckinridge		12	42.0	− 4.0	68	9	20	12	36	1.33	− 2.41	0.85	0.0	4	16	8	6	sw.	W. J. Piggott.
Leitchfield	Grayson	635	15	42.0	− 4.6	70	9	20	18	34	1.62	− 2.81	1.27	0.0	3	18	8	4	nw.	John E. Stone.
Lexington	Fayette	989	23	39.6	− 5.1	68	9	22	12	27	1.72	− 1.76	1.35	0.6	7	11	8	11	w.	U. S. Weather Bureau.
Loretto	Marion	681	13	40.8	− 5.3	69	9	11	19	42[a]	1.80	− 1.76	1.10	0.0	2	24[e]	1[e]	4[e]		Loretto Academy.
Louisville	Jefferson	525	38	42.1	− 4.2	70	9	25	30	30	3.32	− 0.86	2.69	T.	7	14	9	7	w.	U. S. Weather Bureau.
Marion	Crittenden		16	44.2	− 4.1	78	24	23	12†	37	2.64	− 1.45	1.65	0.0	2	13	6	11	nw.	B. C. Paris.
Maysville	Mason	524	14	38.5	− 6.3	73	9	18	20	46	1.37	− 1.95	0.60	0.0	5	13	5	12	nw.	Mrs. Mary D. Marsh.
Middlesboro	Bell	1,128	17	41.2	− 4.7	68	9	18	12†	43	1.15	− 2.52	0.56	0.0	7	19	9	2		B. H. Perkins.
Mount Sterling	Montgomery	930	21	39.2	− 5.1	67	9	22	12†	35	1.91	− 1.54	1.03	0.0	6	17	8	5	nw.	James O'Connell.
Owensboro	Daviess	479	14	41.6	− 6.1	70	9	22	18	35	1.57	− 1.84	0.82	0.0	4	14	4	12	nw.	Henry S. Berry.
Owenton	Owen	700	14	39.2	− 6.3	66	1†	22	12†	29	2.04	− 1.88	1.18	0.0	4	13	12	5		J. T. Walker.
Paducah	McCracken	341	17								2.02	− 2.32	2.00	0.0	2	19	0	11	n.	S. A. Fowler.
Pikeville	Pike		1								2.96		1.70	T.	6	20	1	9	n.	A. R. Williams.
Richmond	Madison	926	21	41.4	− 5.4	70	9	20	12	31	2.76	+ 0.07	2.12	0.0	8	14	5	11		J. W. Crooke.
St. John	Hardin	777	14	39.6	− 5.9	69	9	18	12	38	1.57	− 2.15	1.05	0.0	6	20	1	9		Bethlehem Academy.
Scott	Kenton		13	40.1	− 4.0	69	9	18	20	38	2.24	− 0.98	1.75	T.	6	11	3	16	nw.	E. B. Wilson.
Shelby City	Boyle	1,087	16	39.6	− 2.1	70	9	15	20	42	1.95	− 1.36	1.00	0.0	6	14	5	11	w.	W. E. Grubbs.
Shelbyville	Shelby	759	21	40.4	− 3.5	68	9	19	17†	33	1.97	− 1.98	1.55	0.0	7	17	4	9	w.	O. M. Lynch.
Taylorsville	Spencer	422	8	39.2		65	1†	16	20	34	2.98		1.76	0.0	7	15	7	8	nw.	E. D. Bourne.
Williamsburg	Whitley	939	13	41.0	− 6.2	76	10	17	12†	49	1.75	− 1.53	1.20	0.0	9	15	2	13	w.	Noble C. Jones.
Williamstown	Grant	943	8	37.4		69	9	18	18†	36	1.45		0.65	0.0	6	16	4	10		Mrs. Sarah E. Carter.
Indiana.																				
Anderson	Madison	892	15	37.1	− 5.2	68	9	19	19	32	2.10	− 0.90	0.97	0.2	9	12	3	15	nw.	W. H. Stanton.
Bloomington	Monroe	744	15	37.0	− 7.3	69	9	19	18†	41	2.11	− 1.20	1.18	0.0	7	15	4	11	sw.	Earl E. Ramsey.

TABLE 1.—*Climatological data for November, 1910. District No. 3*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Indiana—Continued.																				
Bluffton	Wells	835	15	35.2	− 4.7	67	9	15	20	34	3.01	+ 0.12	0.91	T.	9	8	9	13	nw.	Prof. P. A. Allen.
Butlerville	Jennings	767	25	40.0	− 3.3	70	9	18	18	32	1.79	− 1.91	1.30	0.5	6	14	8	8	w.	C. F. Hole.
Cambridge City	Wayne	941	19	36.4	− 3.8	70	9	19	22	37	1.41	− 1.49	0.75	T.	7	12	0	18	nw.	Chas. Lemberger.
Columbus	Bartholomew	632	27	37.0	− 5.4	71	9	14	20	39	2.17	− 1.11	1.08	T.	7	13	1	16	sw.	John A. Perry.
Connersville	Fayette	769	28	37.4	− 3.9	69	9	15	20	40	1.46	− 1.88	0.85	0.5	7	12	9	9	w.	H. T. Swindler.
Delphi	Carroll	668	25	34.9	− 4.3	70	9	15	19	38	1.74	− 1.44	0.92	T.	8	6	10	14	.....	L. A. Higginbotham.
Eminence	Morgan	782	4	37.8	.....	63	24	18	20†	33	2.10	.....	1.57	T.	3	12	11	7	nw.	E. E. Kelso, M. D.
Evansville	Vanderburg	386	34	42.3	− 3.0	68	27	24	30	28	1.13	− 2.98	1.02	0.0	5	13	13	4	nw.	U. S. Weather Bureau.
Farmersburg	Sullivan	.....	12	39.0	− 5.0	71	9	15	20	31	1.17	− 1.07	1.00	0.0	3	9	13	8	nw.	Maurice Yeager.
Farmland	Randolph	1,101	28	37.1	− 3.5	66	9	23	19†	26	2.30	− 0.80	0.64	1.0	7	6	2	22	nw.	W. J. Davisson.
Greenfield	Hancock	905	7	.....	.....	.....	.....	20	22†	.....	1.81	.....	0.90	T.	5	0	18	12	w.	Prof. W. C. Goble.
Greensburg	Decatur	954	14	37.8	− 6.2	61	1	20	13	32	1.53	− 1.50	1.09	0.5	5	8	15	7	w.	Chas. H. Ewing.
Huntingburg	Dubois	.....	2	40.2	.....	69	9	18	18	40	1.36	.....	1.06	0.0	2	.....	.....	.....	.....	H. Dufendach.
Huntington	Huntington	741	17	35.6	− 4.4	66	9	19	19	29	2.07	− 1.17	0.58	2.3	9	7	5	18	nw.	Chas. McGrew.
Indianapolis	Marion	822	39	37.5	− 4.1	68	9	20	30	27	1.90	− 1.62	1.35	0.1	8	8	10	12	nw.	Section Center.
Jeffersonville	Clark	455	28	41.5	− 4.0	69	9	22	20	35	2.94	− 0.97	2.31	T.	6	11	11	8	nw.	John C. Loomis.
Judyville	Warren	.....	3	34.5	.....	69	9	9	19	49	1.23	.....	0.75	T.	5	14	2	14	nw.	Dale R. Warrick.
Kokomo	Howard	840	18	36.1	− 4.7	68	1	15	19	33	1.96	− 1.00	0.65	T.	6	5	13	12	nw.	P. H. Robertson.
Lafayette	Tippecanoe	617	31	34.9	− 4.8	68	9	15	19	36	1.38	− 1.67	0.38	T.	8	12	3	15	nw.	Wm. J. Jones, jr.
Logansport	Cass	620	30	35.6	− 4.8	68	9	17	19	39	1.75	− 1.40	0.62	T.	5	9	0	21	e.	Chas. Massena.
Madison	Jefferson	460	18	40.6	− 3.5	69	9	20	20	39	2.38	− 0.81	1.62	0.0	5	16	1	13	nw.	Dr. J. Cooperider.
Marengo	Crawford	363	28	38.8	− 6.1	69	9	16	20	39	2.94	− 1.76	2.20	T.	5	15	10	5	nw.	J. M. Johnson.
Marion	Grant	814	24	35.8	− 4.4	68	9	16	19	32	2.77	− 0.36	0.98	1.6	9	7	7	16	nw.	James F. Hood.
Markle	Huntington	814	15	34.8	− 5.1	66	9	16	19†	32	2.00	− 0.72	1.00	2.0	5	9	9	12	ne.	I. S. Shideler.
Mauzy	Rush	980	30	36.6	− 3.2	71	1	16	22	37	1.42	− 2.09	0.65	0.6	8	10	6	14	nw.	Elwood Kirkwood.
Monticello	White	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.98	.....	0.75	T.	5	16	4	10	nw.	J. E. Loughry.
Moores Hill	Dearborn	9	9	38.2	.....	67	9	21	20†	32	1.96	.....	1.40	0.1	7	14	2	14	nw.	W. S. Bigney.
Mount Vernon	Posey	410	24	41.0	− 4.6	71	27	22	14	36	0.66	− 3.27	0.32	0.0	4	21	0	9	n.	Chas. M. Spencer.
Paoli	Orange	611	13	39.0	− 5.5	70	9	14	20	41	2.04	− 1.00	1.50	0.0	6	15	12	3	nw.	James A. Gillum.
Princeton	Gibson	481	28	41.6	− 2.3	70	9	18	18	39	1.65	− 1.86	1.45	0.0	3	24	3	3	nw.	Elisha Jones.
Richmond	Wayne	972	25	35.6	− 5.2	67	9	17	20	37	1.23	− 1.86	0.55	T.	6	4	11	15	.....	Walter Vossler.
Rochester	Fulton	775	7	36.6	.....	64	8	22	20†	29	1.39	.....	0.42	T.	4	6	5	19	.....	G. P. Keith.
Rockville	Parke	722	24	37.5	− 4.5	68	9	18	19	29	2.99	− 0.45	2.69	T.	4	12	3	15	nw.	Dr. W. N. Wirt.
Rome	Perry	370	7	43.0	.....	73	9	19	12	41	2.25	.....	1.29	0.0	8	12	8	10	w.	Adam Anspach.
Salamonia	Jay	.....	5	33.8[d]	.....	66	9	15	19	43[d]	2.26	.....	0.66	0.5	9	6[d]	2[d]	20[d]	nw.	Chas. V. Spinner.
Salem	Washington	717	17	39.0	− 5.6	69	9	16	20	38	1.54	− 1.80	0.52	0.0	6	12	14	4	nw.	Emmet S. Allen.
Scottsburg	Scott	570	16	41.0	− 3.9	69	9	20	20	32	1.94	− 1.11	1.51	T.	3	13	9	8	w.	Frank H. Park.
Seymour	Jackson	610	23	39.8	− 3.7	72	9	14	20	37	1.79	− 1.69	1.42	T.	5	15	8	7	w.	J. Robt. Blair.
Shelbyville	Shelby	.....	6	37.0	.....	69	9	17	13†	34	1.65	.....	0.84	T.	5	4	16	10	nw.	Edgar G. Hodson.
Terre Haute	Vigo	498	20	41.4	− 3.0	69	9	20	20	31	3.24	+ 0.03	2.72	0.0	6	10	7	13	nw.	Prof. R. G. Gillum.
Veedersburg	Fountain	612	11	37.8	− 4.4	70	9	14	19	37	1.64	− 0.51	1.17	T.	7	12	8	10	w.	L. A. Culver, jr.
Vevay	Switzerland	525	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Frederica Boerner.
Vincennes	Knox	431	18	39.3	− 2.5	71	9	17	20	36	2.10	− 1.42	1.30	0.0	5	18	1	11	nw.	Garrett V. List.
Washington	Daviess	484	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John T. Harris.
Whitestown	Boone	.....	2	34.7	.....	68	9	18	19	39	1.63	.....	0.90	0.0	5	9	15	6	w.	Clyde O. Laughner.
Winona Lake	Kosciusko	.....	3	35.8	.....	65	9	20	7	28	2.22	.....	0.92	3.5	13	3	13	14	w.	Rev. Albert A. Young.
Worthington	Greene	526	28	39.2	− 3.8	69	9	18	20	40	1.98	− 1.72	1.59	0.0	5	10	12	8	nw.	D. W. Solliday.
Illinois.																				
Albion	Edwards	531	19	40.6	− 3.2	69	9†	19	12†	37	1.03	− 2.44	0.85	0.0	3	18	6	6	nw.	B. F. Michels.
Charleston	Coles	720	25	38.8	− 3.5	70	9	17	20	35	3.42	+ 0.14	3.12	0.1	6	7	16	7	nw.	Jacob B. Daisy.
Danville	Vermilion	604	9	38.5	.....	69	9	18	18†	38	1.85	.....	1.39	0.5	5	11	5	14	nw.	J. J. Lemon.
Equality	Gallatin	421	12	43.2	− 4.7	75	27	20	12	38	0.24	− 2.83	0.10	0.0	4	18	6	6	s.	Dr. L. W. Gordon.
Fairfield	Wayne	495	17	40.5	− 4.9	72	9	17	12	40	0.96	− 2.23	0.96	0.0	1	13	0	17	nw.	Geo. A. Tromly.
Flora	Clay	495	24	40.0	− 2.6	68	23	18	12†	37	0.78	− 2.57	0.59	0.0	2	15	8	7	nw.	Jos. S. Peak.
Golconda	Pope	500	32	42.0	− 4.8	81	27	21	6†	40	1.50	− 2.70	1.16	T.	5	16	5	9	nw.	Dr. D. Lawrence.
Hoopeston	Vermilion	715	8	36.4	.....	68	9	14	19	4	0.85	.....	0.57	T.	7	14	6	10	.....	S. F. Hoskinson.
McLeansboro	Hamilton	462	27	42.0	− 2.9	70	26	18	30	47	0.56	− 2.91	0.40	0.0	2	23	2	5	w.	C. C. Judd.
Martinsville	Clark	630	22	39.0	− 3.1	72	9	18	12†	43	3.10	− 0.23	2.50	T.	3	9	10	11	n.	G. M. Daugherty.
Mount Carmel	Wabash	424	9	39.6	.....	70	9	20	12†	40	1.74	.....	1.12	0.0	6	16	3	11	n.	Mrs. H. M. Phillips.
New Burnside	Johnson	556	15	42.6	− 4.8	75	27	20	29	34	0.23	− 3.18	0.23	0.0	1	17	9	4	w.	Geo. Harris.
Olney	Richland	486	23	40.8	− 3.3	72	9	17	12	36	2.32	− 1.20	2.04	0.0	4	12	10	8	nw.	Victor E. Phillips.
Palestine	Crawford	500	28	40.6	− 2.3	71	9	19	20	39	2.45	− 1.20	2.05	0.0	4	9	10	11	nw.	Duane Shaw.
Paris	Edgar	600	17	36.2	− 6.0	69	9	17	19†	35	2.65	− 0.67	2.10	0.0	2	16	8	6	nw.	H. P. Twyman.
Philo	Champaign	700	26	35.8	− 3.8	69	9	15	19†	38	2.69	− 0.41	2.12	T.	4	12	11	7	nw.	H. A. Burr.
Rantoul	....do....	768	19	37.4	− 2.5	71	9	14	19	36	0.80	− 1.83	0.62	T.	5	14	8	8	nw.	Wm. Breiner.
Robinson	Crawford	500	10	40.5	− 3.9	70	9	18	20	38	2.48	− 0.37	1.52	0.0	5	11	8	11	nw.	A. P. Woodworth.
Sumner §	Lawrence	459	4	40.9	.....	68	9	19	12†	35	1.77	.....	1.59	0.0	2	11	8	11	n.	O. A. Fyffe.
Tuscola	Douglas	644	17	38.6[a]	− 2.7	73	9	14[b]	22	42[b]	1.61	− 0.89	1.25	0.0	3	16	7	7	w.	E. W. Lester.
Urbana §	Champaign	725	8	36.6	.....	70	9	17	20†	35	1.20	.....	1.01	T.	4	7	18	5	nw.	Prof. J. G. Mosier.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
[d] Estimated by observer.
|| Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 3, Ohio Valley.*

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New York.																															
Allegany	Allegheny		.17			T.	*	.29	T.		.24	.05	*	.06	.05		.03	.04	T.	.01		.30		.43	.30	.08	.12	T.	*	.13	.12	2.42
Bolivar	do		.22			T.	T.	.24	.30	.21	.15		.35	.18	.17	.04	.07	.03	.07	.05					.08	.30	.11		.57	.03	.11	3.28
Franklinville	do																														
Olean	do		.16	.08				.37	.18			.55	.35	.20	.24	.28	.25		T.	.06						.07	.25	.10			.60	.12	3.86
Pennsylvania.																															
Aleppo	Ohio		.40								.32	T.	.05			T.			T.				.05	T.		.08			.15	.75	T.	1.80
Baldwin	Allegheny		.25								.42	.01	.08	T.	T.	.10	T.	.10	T.	T.	T.		.08	T.	.15		.20		.30	.30	.10	2.09
Beaver Dam‖	Ohio		.24				T.		T.	.04	.02	.23	.05	.02	T.	.08	.04	T.		T.			.03	T.	.21	.17	T.		.10	.08	.01	1.32
Bradford	Allegheny		.29				.05	.19	.28	T.	.43	.26	.62	.43	.19	.08	.14		.03					.03	.02	.42	T.		.57	.25	.14	4.42
California	Monongahela		.28				.01					.02	T.		.50	.25				T.			.25			.30			.10	.20	T.	1.91
Clarion	Allegheny																														
Claysville	Ohio		.35				T.		.04		.20	.04	.03	.11	T.	T.	.02	T.	T.				T.	.03	.02	.09		.01	.45	.18	T.	1.57
Confluence‖	Youghiogheny	.08	.10				T.			T.		.10	.06	.12	T.	.10	.04	T.					.08		.06	.08	.12		.26	.48	.14	1.82
Davis Island Dam‖	Ohio		.34	T.			.01	T.	.02	T.	.05	.16	.05	.03	.01	.15	.02	T.	T.	.01			T.	T.	.05	.03	T.		.19	.35	.01	1.48
Derry Station	Allegheny		.54				.04		.05		.15	.05	.09	.07		.23							.05	.10		.03			.62	.13	.07	2.22
Franklin	do		.38				.02	.01	.12		.01	.70	.20	.24		.24	.20	.06		T.			.04		.20	.34	.01		.04	.14	.16	3.11
Freeport‖	do		.74	T.						T.	.12	.33	.12	.01	.06	.12	.04	.02							.08	.19	T.		.20	.49	.03	2.55
Greensboro‖	Monongahela		.20	.04								.18	T.	.10		.04	T.	T.					.10		.04	.12	.08		.34	.90	T.	2.14
Greensburg	Youghiogheny		.28				.03		.08		.12	T.	.20	T.	.04	.09	.01	T.	T.	T.			.02	.06	.03	.04		T.	.02	.10	.08	1.80
Greenville	Ohio		.40			T.	T.	T.	T.	T.	.76	.53	.51		.06	.18	T.	T.	T.	T.			T.	T.	T.	.48	T.	.02	.27	.19	.21	3.61
Grove City	do	T.	.18			T.	T.	T.	.02		.31	.05	.35	.08	.03	.13	.02	.02	.01						.28	.24			.13	.06	.17	2.08
Herrs Island Dam‖	Allegheny		.31	T.			T.		T.	T.	T.	.23	.02	T.	T.	.25	.02		T.	T.			T.	T.	.09	.03	T.		.16	.42	.02	1.55
Indiana	do		.47						.07		.20	.08	.13	.05	T.	.30										.45			.70	.20	.15	2.80
Irwin	Monongahela		.39						.10		.15	.02	.02	.02	T.	.13	.01	T.	T.	T.					.10	.05			.70	.10	T.	1.79
Johnstown	Allegheny		.13				.04	.20	.01		.04	.12	.10	.07	.18	.15	T.	T.	.01			.04		.04	.09	.07		.02	.38	.21	.06	1.96
Lock No. 4‖	Monongahela		.30	T.			T.					.20	T.	.10		.14	.02	T.					T.	T.		.02	T.		.25	.70	.03	1.76
Lycippus	Allegheny		.35				.05		.09		.15	.01	.19	.07	.06	.27	T.	T.					.04		.10	.04			.75	.27	.17	2.61
Parkers Landing‖	do		.26				T.	.04	.02	T.	T.	.62	.50	.10	T.	.50	.08	T.	T.	.02			T.		.24	.08			.04	.48	.20	3.18
Pittsburg	Ohio		.26			.01	T.	T.	.03		.14	.01	.05	.01	.14	.01	T.	T.	T.			T.	.01	.03	.02	.01		.03	.50	.02	.04	1.32
Saegerstown	Allegheny		.48				.10	.22	.15	.02	.78	.50	.98	.13	.08	.68	.11	.03	.05				.05	.05	.11	.54			.15	.15	.14	5.50
Saltsburg‖	do		.30	.06			.04		.04			.18	.12	.04	.02	.14	.02	T.	T.	T.			T.	T.	.10	.02	T.		.26	.54	.02	1.90
Skidmore	Ohio												.20		.10	.10								.25		.25			.20			1.10
Somerset	Youghiogheny		.31						.11		.15	.20	.05		.10	.02	.01	T.						.06	.10		.15	.50		.35	.24	2.35
Springdale‖	Allegheny		.37							.08		.25	.06	.03		.14	.03			.01			.03		.06	.04			.16	.42	.02	1.70
Uniontown	Monongahela		.40				.07				.26	.12	.07	.10		.03	T.	T.					.10	.03		.13		T.	.98	.20	.02	2.51
Warren	Allegheny		.26				T.	.66	.30		.50	.66	.80	.20	.14	.10	.16						T.	.08	.02	.14	.10		.48	.12	.34	5.06
West Newton‖	Youghiogheny		.16	.06					T.	.01		.12	.04	.06	T.	.02	.14	T.	T.	T.			.01		.12	T.	T.		.20	.60	.10	1.70
Maryland.																															
Deer Park	Youghiogheny		.24								.10	.20	.10	.20		.20							.60		.05	.43			.65	.30	.20	3.27
Grantsville	do		.05				.05		T.		T.	.30	.20	.10		.30	.05	T.					.10			.50			1.05	.30	.40	3.40
Oakland	do	.15			T.		.01				.12	.12	.10			.20	.04	.01		.02			.55	.04	.03	.28		.06	.65	.34	.22	2.94
West Virginia.																															
Bancroft‖	Great Kanawha		.22								.13			T.												.35		.03	.53	.33	T.	1.59
Beckley	do		.45																									.60	1.00	.10	.10	2.25
Bens Run	Ohio		.34								.39	.03	T.											.15	.19			.08	.97		.09	2.24
Bluefield	Great Kanawha		.10								.05				.20											.10		.75	.60	T.	T.	1.80
Brandonville‖	Monongahela							.25	.16																	.25	.10		.45	.50	.45	2.25
Buckhannon	do		.40								.15	T.	T.		T.	T.	T.						T.	.32		.10		.23	.40	.14	.15	1.89
Cairo	Little Kanawha	.05									.35	.05											.12	.02	.08	.06	.05		.60	.30	.08	1.73
Central Station	Middle Is. Creek																														
Charleston‖	Great Kanawha		.24		.20						.06														.08	.30			.93	.30	.02	2.13
Creston‖	Little Kanawha		.31	.03	.37						.02	.20											T.		.05	.30		T.	.17	.52	T.	1.97
Cuba	Sand Creek		.18	.03							.25	T.	T.	T.									T.	.10		.09		.22	.51	T.	.02	1.40
Davis‖	Monongahela			.20						.05	.10														.10	1.00						1.30
Elizabeth‖	Little Kanawha		.16		.17						.18		.04					.05					.09		.05	.05			.10	.28	.45	.01	1.58
Elkhorn	Big Sandy	.15	.25	.10						.05					T.												.10	.70	.45	.05	.05	1.90
Elkins	Monongahela		.11	T.			.01				.19	.02	.05	.01	T.	T.	T.	T.		T.		.02	.12	.06	.39	.01			.37	.68	.12	.10	2.26
Fairmont‖	do		.36	.06			T.				T.	.18	T.	.04		T.	T.	T.		T.			.20		.06	.10				.60	.70	T.	2.30
Glenville‖	Little Kanawha		.43	.10	T.							.23											.10		T.	.44				.43	.58		2.31
Grafton	Monongahela		.43								.20	.20			T.	T.	T.		T.				.42	.12	.02	.24			.03	1.50	.31	.10	3.57
Green Sulphur Springs	Great Kanawha		.18	.02	.06						.02	T.	T.		.13									.04	.05	.33			.61	.28	T.	.04	1.76
Hinton‖	do		.10													.10									.08	.12				.62	.16	.02	1.20
Huntington‖	Ohio		.10								.12														.06	.40			.16	.90	.16	T.	1.90
Lewisburg	Great Kanawha		.25	T.	T.	T.				T.		T.			.15									T.	.08			.80	.25	T.	T.	1.53
Logan	Guyandotte		.25	.20		T.					.10		T.		T.	T.								T.	.05	.10		1.20	.45	.10	T.	2.45
Lost Creek	Monongahela		.25				T.				.18	.02	.02	T.	T.									.12	T.			.13	1.03	.04	.05	1.84
Madison[b]	Great Kanawha										.47				T.										*	1.00	.50	.20	.05	.10	.10	2.42
Mannington	do		.30				.01				.22	.05	.05	.02	T.	.02	T.	T.	T.				.14	.08	T.	.17		.03	1.27	.11	.06	2.53
Marlinton	do		.10	T.							.10				T.													.45	.49	T.	T.	1.14
Morgantown	Monongahela		.32	.01							.18	*	*	.38					T.				.03	T.		.08		T.	1.00	.14	.10	2.24
Moundsville	Ohio		.35					T.			.15	T.	T.	T.	T.								T.	.01		.03		.02	.47	.10	.03	1.16
New Cumberland	do		.30								.30	T.	T.		.05	.05	T.	T.	T.						.40		T.	.05		.15		1.30
New Martinsville	do			.35																								.05	.90	.10	.04	1.44
Nuttallburg	Great Kanawha		.36	.01	.02						.10	.05			.13												.06	.06		.04	.09	0.92
Parkersburg	Ohio		.18	.01		T.					.20	T.	T.	T.	T.	T.	T.		T.			T.	.04	.09	.07			.43	.58	T.	.04	1.64
Parsons	Monongahela		.70									T.	.10	.05	.05	T.													.95		.50	2.35
Philippi	do		.32				T.				.16	.04	.04	.05	.03	.04		T.					.51		.09	.16		.05	1.32	.13	.04	2.98
Pickens	do		.13	.10							.32	T.	.20		.05	.21							.47	.21	.17	.53			1.12	.30	.60	4.41
Pineville	Guyandotte			T.	T.						.22	T.													T.	.07	T.	1.81	.87	T.	.02	3.59
Point Pleasant‖	Ohio		.20	.01	.16						.20	T.											.02		.06	.20		.04	.70	.34		1.93
Powellton	Great Kanawha		.21	.13		T.					.08		T.		.10	T.								.10	.02	.64	.02	.02	.43	.07	.02	2.44
Princeton	do			.10											.15													1.25	.60			2.10
Robertsburg‖	do		.18	T.	.13						.13	T.														.35			.65	.18		1.62
Rowlesburg‖	Monongahela		.10	.14			T.					.14	.10	.20		.04	.06	T.					.30	.12	.06	.16			.74	.72	.14	3.02
Ryan	Great Kanawha		.29	.07							.07	T.	T.										T.	.10	.03			.43	.50	.08	.04	1.61
St. Marys‖	Ohio		.22								.05	.30											.12			.22			.64	.54	T.	2.09
Smithfield‖	Fishing Creek		.12								.20	.45		T.	.48	.50	.12					.14				.32			.14	.08	.20	2.75
Spencer‖	Little Kanawha		.35				.15					.24												T.	.10	.09			.38	.47		1.78
Sutton	Great Kanawha	.27	.20	.20							.24	T.	T.	T.											.25			.40	.50	T.	.40	2.46
Terra Alta	Monongahela																														
Union	Great Kanawha		.16																										.42	.08		0.66
Valley Fork	do																														
Webster Springs	do																														
Wellsburg	Ohio	T.	.34				T.				.33	T.	.50		T.	.25			T.				.25	.09	.01	.06		.04	.32	.02	.02	2.23
Weston‖	Monongahela		.30	.12	.06		.04					.14	.08	.10		T.							.18	.04	.08	.10			.50	.40	.10	2.24
Wheeling‖	Ohio		.26					T.	T.		.06	.22	.02	.04	T.	.01	T.	T.		T.				T.	.02	.02	.02		.16	.16	.04	1.03
Williamson‖	Big Sandy		.26	.06							.02	T.				.22									.02			.04	1.68	.10		2.40
Ohio.																															
Amesville	Ohio		.11	.01							.28	T.			T.	T.			T.				.06	.10	T.	.13			.38	.46	.02	.05	1.60
Bangorville	Muskingum	T.		.01		T.	T.	T.			.61	.04	T.		T.	T.			T.			T.		.21	.09				.40	.10	.01	.40	1.87
Bellefontaine	Great Miami		.27	.04	.12						.46	T.			T.	T.			T.					.06	.09				.61	.16	T.	.10	1.91
Bladensburg	Muskingum		.10	T.			T.				.40	T.	T.		T.	T.			T.					.10	.08				.07	T.	.20	.30	1.25
Cadiz	Ohio	T.	.34	T.		T.	.03				.29	.04	.06	T.	.07	T.	T.	T.	T.				.03	.21	.01	.07			.09	.14	.12	.25	1.75

TABLE 2.—*Daily precipitation for November, 1910. District No. 3*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Ohio—Continued.																															
Cambridge	Muskingum		.33	T.							.30					T.								.21	.10			T.	.21	T.	.10	1.25
Camp Dennison	Ohio		.14				.06				.10													.10				1.25	.08		.01	1.74
Canal Dover	Muskingum		.25	T.		.04	T.				.30	T.	T.	T.	T.	.04	T.		T.					.17	.05	.04		.22	.04	.02	T.	1.17
Canton	do		.33			.03	T.	T.			.35	T.	.07			.12	T.	.01	T.				.03	.07	.49			.18	.07	.05	.10	1.90
Cardington	Scioto	T.	.24	.25	T.		T.				.40	T.	T.		T.				T.						.20			.10			.18	1.37
Chillicothe	do			.32																					.16	.01			.71	.02		1.22
Cincinnati	Ohio	.11	.01								.08													.08				1.06			.01	1.35
Circleville	Scioto		.20		.02		T.				.04					T.									.08	.06		.46	.04	.02	T.	0.92
Clarington	Ohio		.32	T.		T.					.16	T.	T.	.63	T.	.02	T.		T.				.02	.05		.05		.05	.85	.12	.05	1.72
Columbus	Scioto	.11		.01		T.					.08	T.	T.		T.	T.	T.		T.					.07	.12			.30	T.	T.	.10	0.79
Coshocton	Muskingum		.20								.48			.03											.28	.04			.35		.15	1.53
Dayton	Great Miami		.16	T.		.04					.21	T.												.11	.04			.35	.03		.02	0.96
Delaware	Scioto																														
Demos	Ohio		.30								.27	.05	.05	T.	T.	T.	T.							.17	T.	.04		.06	.42	.07	.12	1.55
Dennison	Muskingum		.41						.02		.27	.02	.02		.03	T.	T.		T.				T.	.37	.06	.01		.19	.07	.01	.12	1.60
Frankfort	Scioto		.32																					.22				.70	T.		T.	1.24
Garrettsville	Mahoning		.34			T.	T.	.22			.79	.08	.48		.07	.20	T.	.02	T.	T.				.14	.21	.11		T.	.14	.22	.11	3.13
Granville	Muskingum		.23	.05			.04				.39	T.	T.	T.	.02	T.	T.		T.					.20	.15			.30	.03	T.	.05	1.46
Gratiot	do		.16	.12							.13	.01	.01		T.	T.	T.		T.					.14	.07			.18	.02	.01	.12	0.97
Green	Ohio				T.						.27																12	.70	.33		T.	1.42
Green Hill	Muskingum	T.	.27	T.		T.	T.	T.	T.		.20	T.	.09	T.	.14	T.	T.	T.	T.	T.		T.	.04	.12	.30	T.		.05	.09	.05	.04	1.45
Greenville	Great Miami		.39			.08					.29													.08	.20			.62	.34		T.	2.00
Hillsboro	Scioto										.71	T.	T.			T.						T.		.06	T.			1.71	.11	T.		2.59
Ironton	Ohio		.18								.17													.05	T.	.28		.76	.26	.04	T.	1.74
Jacksonburg	Great Miami	.25										.11												.15				.80		.05	.02	1.38
Kenton	Scioto		.54	.03		T.				.94	T.				T.										.03			.70	.28	T.	T.	2.52
Killbuck	Muskingum																														
Lancaster	Ohio	T.	T.	T.		T.			T.		.60	T.			T.	T.			T.					.14	.15			.31	.06	T.	.10	1.36
Lawshe	do																														
McConnelsville	Muskingum			.12							.28	T.	T.	.10	.02	T.	.03		.04					.16	.05			.29	.49	.10	.10	1.78
Marietta	Ohio		.23	.03							.25	T.			.01								.06	.09	.11	.11		.15	.72	.03		1.79
Marion	Scioto	.28		.10		.10					.60	T.			.04	T.						T.		.22	.17			.75	T.	T.	.18	2.44
Milfordton	Muskingum		.16	.19							.54	T.	T.		T.	T.								.11	.03			.50	T.	T.	.15	1.68
Milligan	do			T.							.18	T.	T.			T.			T.					.14	.09	.05		.23	.15	T.	.11	0.95
Millport	Ohio			.22		T.	T.				.24	T.	.01		.15	T.	T.	T.	T.			T.	.02	.17	.22	.05		T.	.10	.03	.02	1.23
Nellie	Muskingum				T.	T.					.48	T.	T.		T.											T.		.05	T.	T.		0.53
New Alexandria	Ohio		.75			T.						T.	T.	T.	.20		T.	T.				T.						.25	T.	.20	T.	1.40
New Berlin	Muskingum		.35								.59	T.	.40		.20	.17		.04					.15	.40			.15	.10		.23	.10	2.88
New Waterford	Ohio		.33									.10	.40	T.	.40	.40						T.		*	*	.58				.57	.10	2.88
Ohio State University	Scioto		.13	.01		T.					.24	T.	T.		T.	T.	T.		T.					T.	.22			.37	.04	T.	.06	1.07
Pataskala	Muskingum	T.	.19	.08			.02				.31	T.	T.	T.	T.	T.	T.		.01					.14	.09			.26	.04	.01	.08	1.23
Philo (1)	do		.13	.10							.12	T.							T.					.10	T.			.22	.24	T.	.05	0.96
Piqua	Great Miami		.23	T.			.20				.29	T.			T.	T.										.22			.68	.32	T.	1.94
Plattsburg	do		T.	T.		T.					.52	T.				T.								.17	.15			.30	T.	.10	.10	1.34
Pomeroy	Ohio																														
Portsmouth	do		.09								.11	T.	T.										T.		.06	.06			1.23	.02	T.	1.57
Prospect	Scioto			.25		.10					.22					.18	T.												.90		T.	1.65
Rittman	Muskingum			T.			.05				.62	T.	.50		.10	T.								.35	.20	.02		.15	T.	.05	.10	2.14
Shenandoah	do		.20	T.		.08	.05				.78	.05			.09	T.	T.		T.					.26	.31			.27	.10	.03	.04	2.26
Sidney	Great Miami		T.			.13					.35	T.			T.									.07	.09			.92	.31	T.	.08	1.95
Somerset	Muskingum		.18	T.	T.						.11	T.	T.	T.			T.	T.		T.					T.	.15		.03	.28	T.	.07	0.82
Springfield	Great Miami		.04	.01		T.					.21					T.								.10	.14			.47	.04	.04	.06	1.11
Summerfield	Ohio		.35	.03							.25	T.	.01	T.	T.	T.			T.				.03	.09		.11		.21	.38		.04	1.50
Thurman	do		T.	T.							T.	T.	T.											T.			.70	.72	T.		T.	1.42
Urbana	Great Miami					.02					.29	T.												.15	.10			.50	.10	T.	.04	1.20
Warren	Mahoning	T.	.44	T.		T.	T.	.05			.37	.15	.64	T.	.46	.31	.12	.04	.04				T.	.14	.22	.03		T.	.18	.10	.12	3.41
Waverly	Scioto		.21	T.							.31	T.	T.											.35				.95	.50		.12	2.44
Waynesville	Great Miami	.20																						.13				.50			T.	0.89
Wooster	Muskingum	T.	.20	T.		.05	.02	T.			.73	.05	.02	T.	.05	T.			T.				.03	.25	.39	.02		.25	.07	.03	.20	2.36
Youngstown	Mahoning		.30					T.				.14	.25	.40	.20	.10							.10		.25	.32				.15	T.	2.21
Zanesville	Muskingum		.16		T.						.16	.01	T.	T.		T.	T.			T.					.14	.06		.02	.26	T.	.02	0.83
Virginia.																															
Big Stone Gap	Tennessee		.10	T.		T.					T.				.60									T.			.15	.62	.70	.10	T.	2.27
Blacksburg	Kanawha		.04	T.							T.		T.		.05									.02				.34	.30	T.	T.	0.75
Burkes Garden	Tennessee		.30	T.							T.				.30									T.				.75	.09	T.	T.	2.04
Elk Knob	do		.11			.06	.01				.08				.60									.08	.07	.17	T.	.36	.46	.05	T.	2.05
Galax	Kanawha			.05											.33											.05			.40	T.	T.	0.83
Ivanhoe	do		.04	.08								.06			T.	.44									.02	.15		.12	.13	.20	T.	1.24
Lebanon	do		.07	.02											.46										.95			.67	1.30	.02	T.	3.49
Marion	Tennessee		.27								T.				T.	T.										1.60		.23	.83		T.	2.93
Max Meadows	Kanawha																														
Mendota	Tennessee																														
Radford	Kanawha															.30									T.				.34	.50		1.20
Speers Ferry	Tennessee		.10			.10						.08				.20									.24	.10			1.50	.08		3.00
Wytheville	Kanawha		T.	T.							.01				.21									.03	.01	.01		.42	.24		T.	0.93
North Carolina.																															
Altapass‖	Tennessee										.02				.03										.05					.10		0.20
Andrews	do		.04			.12					.09				.01										.25			.48	.75			1.74
Asheville	do		.01	.01		.04					T.				.01									.02		.02		.03	.21		T.	0.35
Banners Elk	do		T.								.20				.17									T.	.12	.28		.12	.50			1.39
Brevard	do														T.													.32	T.			0.32
Bryson City‖	do					.32						.08				.05									.06	.42		.19	.80			1.95
Cullowhee	do					.12					.03				T.										.02	.14		.39	.40		T.	1.10
Hendersonville	do																														
Highlands	do																														0.00
Hot Springs	do		T.			.04					.12				.07									T.	.29	.21		.07	.81		T.	1.61
Jefferson	Great Kanawha		T.	T.							T.				.16									T.		.65		.03	.42			1.26
Marshall	Tennessee										.10													1.51			.15	.40			.03	2.19
Murphy‖	do									.40						.10												.40	.60			1.50
Rock House	Savannah					.13					T.				.01									T.		.04		.65	T.		T.	0.83
Waynesville‖	Tennessee			.10			.07					T.			.01	.01	.01							.04				.02	.78			1.04
Georgia.																															
Diamond	Tennessee		.02			T.					.19				.03									T.	.04			.94				1.22
Lafayette	do		.31								T.													.09				.97				1.37
Alabama.																															
Bridgeport	Tennessee					.07	.05																		.21	.03			.90			1.26
Decatur	do					.46	.08										T.	.01							.12			.03	1.32		.05	2.07
Florence	do					.46																			.40			T.	.70		.06	1.62
Guntersville	do					.14	.12					T.				T.									.06			T.	.34		.01	0.67
Madison	do					.52												T.						.22	T.			1.30				2.04
Riverton	do					.44											T.									.06			1.74			2.24
Scottsboro	do					.25					T.													.12				1.37				1.74
Tuscumbia	do					.19																			.16				.61		T.	0.96

TABLE 2.—*Daily precipitation for November, 1910. District No. 3*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Tennessee.																																
Ashwood	Tennessee									.10														T.				.20	.60			0.80
Benton	do		.10			.23						.12				.05									.07	.05		.70	.82			2.07
Birds Bridge‖	do			.06			.03																		.19			.03	.87	.08		1.43
Bluff City‖	do		.12									.18				.16									.22	T.			.86	.12	T.	1.66
Byrdstown	Cumberland		.20																					.40	.50			.40				1.50
Carthage‖	do		.07								.05													T.	T.	.25	T.	.19	.90			1.46
Cedar Hill	do																								.20	.40		.10	1.20			2.31
Celina‖	do		.10			.20					.08				.03									.20	T.			.18	1.32	.01		2.16
Center Point	Tennessee	T.				.45	T.																		.02	.05		.05	.15			0.31
Charleston‖	do		.04	T.		T.																		.13		.10		1.02	.13			1.54
Chattanooga	do		.01			.15																		.07				.56	.03			0.89
Clarksville	Cumberland		.03		.02	.13					.05														.05	.08		.10	.65	T.		1.27
Clinton‖	Tennessee		.03	T.		.05					.05	.10			.10	.06								.20		.22		.08	.90			1.50
Dandridge‖	do											.10												.06	.04	.20		.12	.55			1.16
Decatur	do		.04			T.	.01				.13				.01																	T.
Dickson	Cumberland		T.		T.	T.					T.														T.		T.	T.				1.50
Dover	do					.15					.06													.21	.05	.27		.20	.56			1.40
Dunlap	Tennessee			.15							T.					.20											.40	.50	.10	.05		1.63
Elizabethton‖	do		.04			.14					.15				.04										.08	.28		.28	.62	T.	T.	1.66
Erasmus	Cumberland					.14																		T.	.03	.14		.75	.60		T.	1.23
Florence	do		T.			.15					.03														T.			.05	1.00			1.89
Franklin‖	do					.22																				.73		.22	.72			1.24
Halls Hill‖	do					.11					T.													.28	T.	.21		.09	.55			2.60
Harriman	Tennessee					.34																				.16		1.05	1.05			1.45
Hohenwald	do				T.	.62																		.11	.01			.43	.24		.04	1.12
Iron City	do					T.					.07				.05										.14	.02		.05	.74		T.	1.28
Jefferson City	do		.05			.01					.06				.26									.10	T.		T.	.73	.03	T.	T.	0.80
Johnson City‖	do	.03	.06			.14					.10													.02				.15	.29	T.		
Johnsonville	do		.10		T.																											1.05
Jonesboro	do																								.25	.25		.05	.36			0.97
Kingston‖	do		T.			.04	.07				T.	.03				T.								.20	.01			.28	.34		T.	1.35
Knoxville	do		.02			.07					.05				T.									.02		.22		.44	.55			1.08
Lebanon	Cumberland					.05					.06				.01									T.	.03			.18	.69			3.46
Lewisburg	Tennessee		T.			.18					T.														.25		1.50	1.42	.29			1.17
Livingston	Cumberland											T.				T.									.13	.19		T.	.64			1.56
Loudon‖	Tennessee		.01			.10	.10																		.15			.28	.98			1.56
Lynnville	do						T.	T.	.15																.05	.15		.06	1.00			1.49
McGhee‖	do		.08			.05	.17																	.17	T.	.34		.18	.60		.01	1.38
McMinnville	Cumberland		.04			.13					.02													.08	.15	.16		.04	.74			2.17
Maryville	Tennessee		T.	.08		.02	.11				T.														.19	.65		.12	.63			1.17
Mountain City	do										.30				.28									.04	.14		.01	.79	.08	T.		2.10
Nashville	Cumberland	T.	.01		.01	.04					.05														.35	.50			1.00			1.70
Newport‖	Tennessee														.25											.25		.65	.80			1.29
New River‖	Cumberland																											.06	.78			1.42
Palmetto	Tennessee		.02		T.	.18											T.							.25	T.			.43	.68			
Pinewood	do				T.	.20																		.11								
Pope	do																								.04	.02		T.	.86	T.		1.13
Rogersville‖	do		.04	.01		T.						.06			.04	.06								.15		.30		.75	.62			2.24
Rugby	Cumberland										.05				.37													*	2.00			2.00
Savannah	Tennessee		T.																					.13	.17			.16	.90	.01		1.60
Sevierville	do		.08			.08	.01				.06															.29		.67		T.		1.05
Sewanee	do										.09													.03	T.			.25	.75			1.13
Sparta	Cumberland		.05				.05																									
Springdale	Tennessee																							.15	.01		.15	.14	.09	T.		0.82
Springville	do		.05			.07					.15			.01											.25				.85		T.	1.49
Tazewell‖	do		.15	T.		.06						T.			.18	T.								.06	.06	.07		.17	.88		T.	1.34
Tullahoma	do					.10																				.32	.30	.10	.65			1.76
Walling‖	Cumberland					.18					.21													.30	.06			.44	.84	.01	T.	2.18
Waynesboro	Tennessee		T.			.42								.05														.75	.40	T.		1.41
Wildersville	do					.26																		.10	.26			1.45				2.23
Worsham‖	Cumberland	.13			.10						.19															.05	T.	.37	.87			1.69
Yukon	Tennessee		T.			.40																		T.				1.80				2.20
Kentucky.																																
Alpha	Cumberland		.05			.35					T.				T.									.25				2.25	.04		T.	2.99
Anchorage	Ohio	.11	.26			.08						.10																.24	1.10	T.		1.66
Bardstown	Salt		.10			.12					.10					.10	.42									.16	.08		.12	1.74		.08	3.84
Beattyville	Kentucky		.88			.08					.18					T.							T.					1.05				1.51
Beaver Dam	Green		.21			.25	T.									.15	T.							T.					1.30	.97			2.67
Berea	Kentucky		.21			.04						.02				T.													.10	.67			1.19
Bowling Green	Green					.40						.06				.20	T.									.06	T.		.10	1.10	.04		1.74
Burnside	Cumberland		.06			.12																		T.								
Cadiz	do														.02													.58	.45			1.22
Calhoun	Green	T.	.17																						.04	.48		.10	.96	.12	T.	1.91
Catlettsburg	Big Sandy		.10		.01	T.					.10																	.56	1.61			2.80
Earlington	Green		.33			.30									.04									.07				.29	.50			1.22
Edmonton	do		.13			.19									.09														3.77	.05		4.29
Eubank	Cumberland		.16			.13					.09				.09										.08			30	.94			1.64
Falmouth	Licking		.22			.04					.06													.13	T.	.02		85	.52	T.	T.	1.92
Farmers	do		.11			T.					.29				T.										T.			54	.51	.30		1.76
Frankfort	Kentucky		.13			.21					.07														.15	.16			31				1.03
Franklin	Green		.11			.30					T.															.12			08	2.09	.01		2.83
Greensburg	do		.09			.06									.38											.02			19	2.20	.10		2.68
High Bridge	Kentucky		.05			.07					.05																		70				1.09
Hopkinsville	Cumberland		.15			.20																			04				85	.10			1.33
Irvington	Ohio					.10																			28				1.27				1.62
Leitchfield	Green					.25					T.				.10														1.30	.06		.04	1.72
Lexington	Kentucky	.06	.02			.18					.06													T.					1.10	.70			1.80
Loretto	Salt																												2.69	.01		T.	3.32
Louisville	Ohio	.39			.04	.03					.03														.13								2.64
Marion	do	T.				.99					T.														T.		T.	1.65				1.37
Maysville	do		.10			T.					.12															.13			.60	.42			1.15
Middlesboro	Cumberland					.15					.10				.04									.05	.04			.21	.56			1.91
Mount Sterling	Licking		.11				.05				.12						T.							T.	T.			.43	1.03	.17	T.	1.57
Owensboro	Ohio		.25			.45					.05																	T.	.82			2.04
Owenton	Kentucky					.43																		.21				.22	1.18			2.02
Paducah	Ohio		T.			.02																			T.				2.00			2.02
Pikeville	Big Sandy		.30	T.							.12	T.					.04									.52	T.	.10	1.70	.22	T.	2.96
Richmond	Kentucky		.08			.08	.03				.09						T.				T.		T.	T.			T.	.21	2.12	.11		2.76
St. John	Salt		.08			.07					.11					.06	T.				T.		T.	.08				.20	1.05			1.57
Scott	Licking	T.	.20			.04					.12					T.	T.	T.						.03				1.75	.05		T.	2.24
Shelby City	Kentucky		.08			.05										.11									.03			1.00	.68			1.95
Shelbyville	Salt		.11			.09	.03				.06													.07				.10	1.55			1.9
Taylorsville	do		.17			.03	.01				.08															.04		1.76	.86			1.7
Williamsburg	Cumberland		.16	T.		.10					.02				.03	.01										.13		.13	1.20	.06		1.45
Williamstown	Licking		.19			.09					.04																	.35	.65			1.13

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Indiana.																															
Anderson	W. Fork, White	.06	.24	T.		.10					.27				T.	T.	T.	T.						.07	.15			.97	.22		.02	2.10
Bloomington	do		.16			.14	T.				.17											.01			.03			1.18	.42	T.		2.11
Bluffton	Wabash	T.	.29	.05		.18					.59					.05						T.		.03	.11			.80	.91		T.	3.01
Butlerville	E. Fork, White					.13					.12													.11				1.30	.06		.07	1.79
Cambridge City	Whitewater			.07	.06						.28	T.				T.									.08	.02		.75	.15		T.	1.41
Columbus	E. Fork, White		.16			.10					.09													.04	.08			1.08	.62		T.	2.17
Connersville	Whitewater	T.	.25	T.		.05					.12		T.			T.								.06	T.			.85	.08		.05	1.46
Delphi	Wabash		.05	.02		.18					.23				T.										.03	.06		.25	.92			1.74
Eminence	W. Fork, White	T.	.35			.18	T.																	T.				1.57	T.		T.	2.10
Evansville	Ohio	.05			.04	.02																		T.				1.01	.01			1.13
Farmersburg	Wabash					.12					.05																	1.00				1.17
Farmland	W. Fork, White		.46			.08					.43					T.										.24		.64	.40		.05	2.30
Greenfield	E. Fork, White	T.	.35			.09					.28					T.								T.	T.			.90	.19		T.	1.81
Greensburg	do	.21				.09					.10																	1.09			.04	1.53
Huntingburg	Wabash					.30																						1.06				1.36
Huntington	do	.18		.05		.18					.38	T.			T.	.08								T.	.05			.52	.58		.05	2.07
Indianapolis	W. Fork, White	.34	T.		.01	.06					.11				T.									.01	T.			1.29	.06		.02	1.90
Jeffersonville	Ohio	.17	.18		T.	.09					.04													.15				2.31	T.		T.	2.94
Judyville	Wabash	.01	T.			.25					.20				T.							T.		T.	T.			.75	.02		T.	1.23
Kokomo	do	.16	T.			.16					.40											T.		T.	.05			.60	.65		T.	1.96
Lafayette	do		.04	.01		.32					.23				.01	T.						T.		T.		.07		.32	.38			1.38
Logansport	do			T.		.35					.34															.20		.24	.62			1.75
Madison	Ohio	.23									.09													.09				1.62	.35			2.38
Marengo	do	.43				.19					.04													.08				2.20			T.	2.94
Marion	Wabash	.12	.08	T.		.16					.40	T.			T.	T.						.03		.05	.10			.85	.98		T.	2.77
Markle	do	.10	.10			.10					.70				T.									T.	T.			1.00	T.		T.	2.00
Mauzy	E. Fork, White	.02	.30	T.		.08					.16					T.						T.		.06	T.			.65	.09		.06	1.42
Monticello	Wabash		.75			.02					.11				T.										T.			.02	.08		T.	0 98
Moores Hill	Ohio		.12			.08					.04													.08				1.60	.03		.01	1.96
Mount Vernon	do																							.04	.02			.08	.52			0.66
Paoli	E. Fork, White		.25			.18					.01													.09				1.50	.01			2.04
Princeton	Wabash					.15																			.05			1.45				1.65
Richmond	Whitewater	.32				.09					.17													.05	T.			.55	.05		T.	1.23
Rochester	Wabash	T.	T.			T.									T.									.20	.42			.41	.36			1.39
Rockville	do	.14	.01		T.	.15																			T.			2.69			T.	2.99
Rome	Ohio		.45			.05					.05				.03									.10				1.29	.27	.01		2.25
Salamonia	Wabash		.36			.04					.38					.01								.13	.14			.66	.50	T.	.04	2.26
Salem	Ohio	T.	.40			.19					.06													.06				.52	.31			1.54
Scottsburg	E. Fork, White	.18				.25																						1.51			T.	1.94
Seymour	do	T.	.14								.15													.08				1.04	.38		T.	1.79
Shelbyville	do	T.	.25			.11					.11																	.84	.34		T.	1.65
Terre Haute	Wabash	.04	.06			.18					.18																	2.72	.06			3.24
Veedersburg	do	.08	T.			.14					.13				T.							.01		T.	.03			1.17	.08		T.	1.64
Vevay	Ohio																															
Vincennes	Wabash		.10			.10					T.													.10				.50	1.30			2.10
Washington	W. Fork, White																															
Whitestown	do		.14			.06																T.		T.		.06		.90	.47			1.63
Winona Lake	Wabash	.04	.09	.05		.13					.28	.02			.03	.08			T.					.03	.10			.32	.92		.13	2.22
Worthington	W. Fork, White	.12	.01			.16					.06																	1.59	.04			1.98
Illinois.																																
Albion	Wabash	.05																						.13				.85				1.03
Charleston	do	.06			.09	.05				.10																	.94	2.18			T.	3.42
Danville	do	.03			.15					.15																	1.39	.13				1.85
Equality	Ohio	T.			.02																			.02				.10	.10			0.24
Fairfield	Wabash																											.96				0.96
Flora	do	T.				T.					T.																.59	T.				0.78
Golconda	Ohio	.02			T.	.28																		.04				.32	.84			1.50
Hoopeston	Wabash	.07	T.			.06					.10													.01	.02			.57	.02		T.	0.85
McLeansboro	Ohio	.16																											.40			0.56
Martinsville	Wabash	.23			.35																	T.						2.50			T.	3.10
Mount Carmel‖	do		.02			.04					.06													.08				.42	1.12			1.74
New Burnside	Ohio	T.			.23																			T.				T.				0.23
Olney	Wabash	T.			.11	T.				.06												T.		.11				2.04				2.32
Palestine	do	T.				.24					.11																	2.05	.05			2.45
Paris‖	do					T.																						2.10	.55			2.65
Philo	do	.06			.32						.19																	2.12			T.	2.69
Rantoul	do	.07	T.			.09					T.								T.			.01		T.	.01			.62			T.	0.80
Robinson	do		.26							.24													.06				1.52	.40				2.48
Sumner	do	T.				.18					T.													T.				1.59				1.77
Tuscola	do	T.			T.	.32					.04					T.						T.			T.			1.25				1.61
Urbana	do	.01			T.	.17																T.			.01		T.	1.01			T.	1.20

TABLE 3.—*Maximum and minimum temperatures for November, 1910. District No. 3, Ohio Valley.*

Date.	Pennsylvania.				West Virginia.																Ohio.							
	Greenville.		Pittsburg.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington. §§		Morgantown.		Parkersburg.		Wheeling. §§		Canton.		Cincinnati.		Columbus.		Dayton.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	63	31	62	44	71	40	64	32	65	29	68	30	67	35	62	38	66	38	64	34	68	39	65	45	63	44	65	44
2....	57	39	56	39	70	42	58	40	52	38	59	42	49	39	58	40	62	37	48	34	55	34	50	38	50	39	60	39
3....	45	23	45	35	61	34	43	32	42	32	46	31	45	35	45	36	45	35	53	34	56	32	43	30	43	33	46	27
4....	45	29	44	32	48	29	41	29	41	29	50	24	49	28	45	30	47	30	54	30	56	32	48	33	43	30	49	24
5....	40	25	38	31	48	30	40	24	38	23	45	23	44	26	42	25	41	26	41	25	42	31	43	36	42	30	42	27
6....	37	28	36	28	44	34	49	23	39	27	43	35	43	30	39	31	40	29	41	27	38	25	41	27	36	25	39	25
7....	39	24	43	25	62	30	51	26	48	24	50	19	55	25	46	23	50	25	47	25	44	26	55	30	48	25	49	23
8....	40	28	45	34	64	42	67	27	40	25	53	34	54	26	48	37	51	32	48	26	48	32	52	37	47	36	50	34
9....	58	28	63	34	70	33	63	38	67	22	69	24	70	27	66	28	69	30	68	27	63	38	70	35	66	36	68	34
10....	56	36	57	39	70	43	47	33	54	36	65	36	54	33	60	40	60	40	54	33	52	32	61	37	57	36	60	38
11....	38	29	39	30	43	36	40	24	36	25	45	34	42	33	41	28	40	32	35	54	38	30	37	30	36	29	39	27
12....	38	28	35	30	40	29	51	27	30	25	45	30	42	29	32	28	38	32	34	31	38	32	41	26	37	30	37	28
13....	42	32	35	33	43	34	48	30	32	30	38	35	45	30	34	30	39	33	38	33	38	34	46	28	39	31	42	30
14....	36	31	38	31	44	28	50	35	38	30	40	29	42	34	38	32	39	29	40	35	40	31	44	35	37	30	40	27
15....	37	30	35	31	47	35	48	29	33	31	40	35	44	35	33	30	39	35	37	33	38	32	40	33	37	31	37	33
16....	37	31	35	33	40	35	37	28	32	30	37	34	46	25	33	32	37	34	36	32	38	31	38	33	36	32	36	32
17....	34	29	33	30	43	35	42	29	31	25	37	32	45	25	33	32	36	32	37	32	34	28	37	30	35	28	37	29
18....	31	26	33	27	47	28	43	23	37	23	38	20	46	30	32	28	38	31	33	31	35	27	46	28	38	26	41	27
19....	35	29	34	30	48	27	44	23	38	22	41	20	43	22	39	30	41	29	44	30	38	25	44	29	39	29	43	24
20....	40	23	44	24	49	22	55	20	54	18	50	15	47	20	48	18	47	21	38	10	51	29	49	27	43	25	49	18
21....	40	20	46	29	52	39	53	23	50	20	50	20	54	22	48	32	50	29	51	15	40	31	51	34	44	30	46	25
22....	40	30	39	31	52	35	50	29	38	21	48	33	44	31	43	31	45	29	42	20	52	31	43	28	39	29	45	24
23....	47	27	52	31	68	28	62	25	51	15	62	18	63	23	51	33	60	25	53	21	49	29	60	32	50	30	54	28
24....	50	31	47	37	63	39	65	32	56	30	58	38	61	24	50	33	54	33	49	21	49	34	62	34	48	35	51	28
25....	39	34	44	37	66	42	60	38	52	36	50	43	51	34	48	38	49	38	44	29	63	32	53	38	50	35	52	39
26....	43	32	39	33	55	30	50	24	42	23	46	33	48	26	42	30	44	31	47	30	42	30	50	33	43	28	47	26
27....	40	23	43	30	57	36	48	31	41	22	43	25	53	27	45	34	43	32	41	25	40	32	55	39	39	33	41	36
28....	40	34	44	34	55	37	55	32	48	32	43	35	46	40	47	33	46	36	44	27	41	32	55	33	40	35	41	34
29....	35	30	34	30	42	30	35	26	32	25	38	31	34	33	33	30	37	31	35	34	34	26	36	28	35	29	35	28
30....	30	25	30	24	34	28	30	20	25	20	33	27	32	29	30	24	31	26	32	28	33	26	31	23	29	23	31	23
Mns..	41.7	28.8	42.3	31.9	53.2	33.3	49.9	28.1	43.0	26.3	47.7	29.5	48.6	29.2	43.7	31.1	46.1	31.3	44.3	28.2	45.1	30.8	48.2	32.3	43.0	31.1	45.7	29.4

Date.	Ohio.				Virginia.								Tennessee.														Beattyville, Ky. §§	
	Marion.		Waverly.		Big Stone Gap.		Wytheville.		Asheville, N. C.		Decatur, Ala. §§		Chattanooga.		Jonesboro.		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynesboro.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	66	41	78	45	64	32	62	28	62	30	69	33	64	38	.....	.....	64	35	67	43	67	43	71	35	67	37	74	25
2....	67	38	58	37	55	37	49	40	58	42	67	39	61	41	.....	.....	54	39	58	36	57	43	55	43	59	41	45	30
3....	46	31	56	35	46	36	40	33	42	29	52	29	47	35	.....	.....	43	30	48	31	48	25	60	30	45	23	47	29
4....	47	25	70	41	55	28	41	30	42	27	52	26	51	30	.....	.....	49	26	52	28	54	26	60	.....	57	22	54	20
5....	44	24	65	38	42	26	41	28	48	28	51	27	47	41	.....	.....	43	35	49	37	47	40	52	.....	50	41	43	25
6....	37	23	61	28	46	34	43	31	43	31	53	27	50	35	.....	.....	47	32	50	30	50	26	45	.....	48	26	48	25
7....	40	21	57	21	52	20	49	30	53	27	64	28	61	30	.....	.....	57	27	65	34	66	27	60	.....	63	26	62	19
8....	47	34	65	29	61	28	55	33	59	30	73	29	70	45	.....	.....	65	42	68	48	72	37	72	.....	71	36	63	24
9....	65	30	72	29	66	29	66	28	66	30	71	35	70	42	.....	.....	68	34	69	42	70	45	75	.....	69	37	74	25
10....	60	37	60	39	55	33	50	34	57	34	70	39	64	45	.....	.....	61	41	61	38	62	45	70	.....	61	41	52	29
11....	40	29	43	29	49	33	41	28	46	32	60	34	55	38	.....	.....	50	34	51	34	57	28	.....	.....	55	29	46	26
12....	38	27	42	31	42	22	37	24	38	23	50	30	50	30	.....	.....	46	27	48	27	52	22	.....	.....	53	24	45	17
13....	37	30	40	29	50	18	44	27	59	28	60	34	53	31	.....	.....	50	26	53	27	58	24	.....	.....	58	27	55	15
14....	37	32	39	24	50	30	49	33	68	38	70	34	69	43	.....	.....	67	41	64	37	69	41	.....	.....	67	45	44	21
15....	38	30	43	34	50	33	36	30	41	30	66	31	52	34	.....	.....	45	35	47	35	54	25	.....	.....	45	26	42	29
16....	36	30	45	29	42	33	39	26	48	27	58	32	49	34	.....	.....	48	30	50	34	46	31	.....	.....	49	25	45	31
17....	34	28	41	32	41	25	44	21	48	25	53	32	48	32	.....	.....	47	27	52	29	47	22	54	.....	46	35	53	15
18....	34	25	48	27	50	22	46	28	53	30	58	31	52	35	.....	.....	51	30	54	29	54	23	55	.....	54	23	52	16
19....	42	26	51	29	47	24	45	25	46	30	59	32	53	40	.....	.....	50	32	59	31	58	23	58	.....	57	25	53	17
20....	48	17	41	14	55	20	52	18	55	22	61	28	59	32	.....	.....	56	26	60	29	60	21	63	.....	61	23	58	14
21....	41	26	53	18	62	24	49	20	56	24	65	31	61	33	.....	.....	58	29	60	41	62	33	61	.....	62	30	58	19
22....	43	26	47	28	55	28	49	28	55	28	69	32	66	36	.....	.....	62	34	66	36	65	31	66	25	67	30	60	23
23....	47	29	43	29	53	24	55	23	60	27	65	33	66	40	.....	.....	59	34	67	41	61	39	65	30	64	38	61	22
24....	45	31	40	21	56	28	59	35	66	40	73	45	66	51	.....	.....	60	44	70	38	71	47	71	39	68	48	69	24
25....	50	37	51	35	57	30	55	39	60	43	69	48	64	44	.....	.....	60	39	62	43	64	41	63	37	64	44	57	28
26....	48	24	60	41	58	36	53	32	60	36	72	39	58	37	.....	.....	60	33	62	36	69	35	68	30	72	36	61	22
27....	36	30	54	35	49	39	45	32	61	42	69	43	65	50	.....	.....	63	47	70	47	70	57	71	.....	70	56	55	29
28....	38	33	43	34	53	39	50	33	56	32	52	42	60	34	.....	.....	52	34	47	33	65	34	64	35	59	35	43	39
29....	35	29	39	30	39	33	33	27	34	29	49	32	46	30	.....	.....	41	29	43	27	47	23	45	27	45	26	41	29
30....	33	24	34	25	34	26	27	21	30	20	40	29	39	27	.....	.....	37	28	36	26	38	25	41	26	36	26	35	23
Mns..	44.0	28.9	51.3	30.2	51.1	29.0	46.8	28.8	52.3	30.5	61.3	33.5	57.2	37.1	.....	.....	53.8	33.3	56.9	34.9	58.7	32.7	61.0	.....	58.1	32.7	53.2	23.7

TABLE 3.—*Maximum and minimum temperatures for November, 1910. District No. 3*—Continued.

Date.	Kentucky.														Indiana.												Illinois.	
	Bowling Green.		Earlington.		Greensburg.		Lexington.		Louisville.		Maysville.		Williamsburg.		Butlerville.		Evansville.		Indianapolis.		Kokomo.		Rockville.		Worthington.		Philo, Ill.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	64	42	69	41	67	26	64	44	67	47	70	32	69	35	64	47	64	51	61	38	68	46	57	45	58	46	61	39
2....	52	37	49	38	48	37	44	36	52	37	49	37	46	42	57	43	46	34	46	30	54	28	47	28	59	34	42	24
3....	30	25	47	24	55	23	37	27	39	29	48	30	43	29	55	35	45	28	43	27	43	27	44	24	45	23	45	25
4....	55	21	56	23	62	19	46	27	52	31	54	25	50	22	54	22	50	30	48	30	49	21	50	26	51	23	49	20
5....	46	38	43	24	46	46	41	35	43	34	46	25	43	28	41	35	42	32	41	29	43	33	43	34	45	34	42	26
6....	30	25	51	24	47	25	40	24	46	28	45	25	44	27	49	23	47	28	41	24	37	21	43	23	46	24	42	22
7....	59	30	67	32	62	20	56	31	60	36	60	25	63	23	58	25	63	36	55	29	55	22	56	27	59	25	61	23
8....	68	38	71	34	64	20	54	38	56	41	53	36	66	25	58	31	60	41	52	31	50	28	53	38	55	30	52	26
9....	71	38	72	35	71	29	68	41	70	41	73	27	74	26	70	38	68	46	68	41	67	38	68	42	69	36	69	38
10....	50	45	49	44	55	29	59	35	60	38	54	29	76	27	62	40	63	36	59	34	63	36	61	37	62	37	61	32
11....	49	27	47	27	49	25	38	27	42	30	41	24	48	34	42	25	42	30	35	27	40	23	37	27	40	23	34	22
12....	45	20	47	19	47	14	39	22	44	26	45	21	47	17	44	20	44	25	41	23	40	22	42	19	42	19	41	17
13....	31	22	51	21	48	14	46	24	48	29	50	20	53	18	51	19	48	33	45	25	42	23	46	22	47	21	46	21
14....	54	43	51	40	49	18	45	34	48	37	44	27	62	25	47	25	48	37	44	34	41	29	46	35	48	37	45	35
15....	45	34	44	35	40	30	39	31	41	33	39	30	42	32	43	26	39	36	38	31	35	31	38	32	38	34	37	32
16....	48	30	46	25	46	30	35	31	38	29	39	31	47	23	37	30	42	29	35	27	33	27	33	28	37	31	33	28
17....	50	23	45	22	48	19	37	24	40	27	46	31	50	19	35	20	40	26	30	26	33	24	35	21	32	29	32	22
18....	51	21	52	21	49	18	44	24	49	27	50	19	55	20	46	18	47	27	45	23	40	19	43	20	48	20	47	16
19....	57	22	58	22	53	18	46	29	47	28	49	19	54	20	48	23	49	29	42	26	41	15	42	18	37	26	41	15
20....	58	22	59	23	58	16	50	25	52	27	54	18	58	17	52	22	54	28	48	26	48	18	49	22	58	18	49	17
21....	60	29	58	29	60	16	51	36	54	40	54	19	61	23	53	35	54	36	45	29	43	31	43	32	51	36	45	29
22....	60	31	61	29	55	26	47	29	49	31	51	29	60	27	47	21	52	31	42	26	42	22	45	19	49	22	45	15
23....	62	46	68	34	63	26	60	35	63	37	61	23	60	27	60	34	63	42	57	35	55	32	58	36	60	38	56	32
24....	70	40	70	30	69	24	64	37	65	35	63	26	61	32	62	30	66	38	57	38	50	30	55	35	64	32	58	27
25....	61	36	62	31	60	24	51	36	56	42	55	37	70	25	62	31	57	40	52	35	51	30	53	29	55	29	53	26
26....	65	30	64	31	62	25	55	34	57	34	56	24	67	31	54	28	59	38	49	31	47	25	53	31	52	27	52	24
27....	71	34	71	48	66	35	59	45	61	46	56	24	55	43	54	38	68	41	48	38	42	36	50	41	54	45	49	40
28....	38	35	35	33	40	38	54	32	46	33	41	40	42	41	54	35	41	28	38	29	40	31	42	28	54	32	40	28
29....	43	26	40	23	42	27	35	27	40	29	37	20	41	38	40	26	39	26	34	24	33	24	28	21	37	23	34	20
30....	36	23	33	24	.....	22	29	22	33	25	30	26	35	25	31	22	33	24	25	20	28	20	29	20	32	21	29	19
Mns..	54.6	31.1	54.5	29.5	54.8*	24.6	47.8	31.4	50.6	33.6	50.4	26.6	54.6	27.4	51.0	28.9	51.1	33.5	45.5	29.5	45.1	27.1	46.3	28.7	49.3	29.2	46.3	25.3

Climatological Data for November, 1910.
DISTRICT No. 4, LAKE REGION.

Prof. HENRY J. COX, District Editor.

GENERAL SUMMARY.

The month of November, 1910, was cloudy and cold, and in nearly all sections deficient in precipitation. The cold was mainly due to persistent cloudiness, which kept the maximum temperatures low, rather than to any extremely low minimum temperatures. There was a rapid succession of disturbances, mostly of but little energy, moving across the district with their centers well to the south, and, while these conditions were often unattended by any considerable amount of precipitation, the resulting cloudiness was so persistent as to be without precedent in the Great Lake region. As many as 29 cloudy days were observed at Sault Ste. Marie, Mich., and Cleveland, Ohio; and 28 such days at Alpena and Port Huron, Mich., while stations reporting 25 or more cloudy days were quite common. It is a remarkable fact that not one clear day was observed during the entire month at any of the following places: Green Bay, Wis.; Escanaba, Sault Ste. Marie, Alpena, Grand Haven, and Port Huron, Mich.; Erie, Pa.; Buffalo, Oswego, Rochester, Ithaca, Syracuse, N. Y.; and Burlington, Vt. In fact, the area absolutely lacking a clear day embraces the greater portion of Michigan, the portion of the State of New York lying in District No. 4, as well as parts of Wisconsin, Pennsylvania, and Vermont. These cloudy conditions naturally caused relatively low maximum temperatures, which were still further kept down by the prevailing northwest and west winds, especially during the second decade of the month. While southerly winds occasionally prevailed, they were of short duration, because of the rapid movement of areas of high and low pressure across the district.

In strong contrast with the cold weather of this month, is November, 1909, which was unusually warm, the warmest November on record, with the single exception of 1902. During November, 1910, there was not a single storm that seriously affected navigation on the Great Lakes, the total wind movement being much below the normal for November on the upper Lakes, although above the normal on the lower Lakes.

The following table of averages summarizes the main features of meteorological interest in the various portions of the district:

Portions of States lying within District No. 4.	Mean.					Number of days.				Prevailing wind direction.
	Temperature.	Departure from normal.	Precipitation.	Departure from normal.	Snowfall.	0.01 inch or more precipitation.	Clear.	Partly cloudy.	Cloudy.	
Minnesota	23.4	−3.4	0.97	−0.48	8.6	6	7	8	15	nw.
Wisconsin	30.3	−4.2	1.98	+0.09	6.1	8	4	8	18	nw.
Illinois	36.0	−3.2	1.31	−1.19	1.3	12	5	10	15	w.
Indiana	35.5	−4.7	2.06	−0.85	2.4	8	7	6	17	nw.
Upper Michigan	29.2	−1.8	2.04	−0.47	15.0	12	2	5	23	nw.
Lower Michigan	33.2	−2.2	2.13	−0.42	8.8	12	3	6	21	nw.
Ohio	35.7	−4.3	2.44	−0.21	5.8	11	5	5	20	w.
Pennsylvania	37.4	−3.8	3.45	−0.02	14.7	20	0	4	26	w.
New York	33.4	−2.5	2.72	−0.01	14.4	15	3	6	21	w.
Vermont	33.0	−1.2	2.58	−0.61	13.9	13	3	7	20	nw.

TEMPERATURE.

While the mean temperature for the month averaged considerably below the normal in all sections of the district, this was due to uniformly cool weather rather than to extremes of temperature, and due also, as has been stated above, to relatively low maximum temperatures rather than to low minimum readings of a few dates.

The deficiency averaged greatest in the southern portion of the Lake region, where the mean departure from the normal exceeded 4°; moreover, the deficiency exceeded 5° at several individual stations.

The temperature was more nearly normal in the extreme northern portion of the Lower Michigan Peninsula and in the Lake Champlain watershed. In fact, Alpena and Mackinaw, in the former section, actually averaged above the normal, 0.1° and 0.2°, respectively, while Carvers Falls and Chazy, N. Y., in the Lake Champlain watershed, reported an average excess of 2.5° and 0.3°, respectively. Because of the unusual cloudiness during the month there was not the customary range between day and night temperatures, the mean daily range for the entire district being only 10.1°, which is in strong contrast with November, 1909, when the average daily range was 15.5°. Moreover, during the greater portion of the month the temperatures remained several degrees below normal, with very slight changes from day to day.

Following a comparatively warm October, the month opened with temperatures above the normal, except in the extreme northwest portion, where cool weather had appeared. This area of cool weather gradually extended eastward, covering during the 2d the entire district west of Pennsylvania and reaching the eastern limits during the 3d. The temperature continued comparatively low in all sections until the 20th, with the exception of a slight break on the 9th and 10th. The rise in temperature, which appeared in the extreme western portion of the district on the 20th, did not extend eastward generally until the 23d. Then followed a few days with temperatures above normal to be followed in turn on the last few days by lower temperatures, except in the Lake Champlain watershed.

The highest temperatures, as a rule, occurred during the first decade and chiefly on the 1st, 2d, or 9th, while the lowest readings were observed during either the last half of the 3d week or in the closing days of the month.

PRECIPITATION.

While the total precipitation averaged for the entire district below the normal, the distribution geographically was irregular, and often where considerable deficiencies were noted, close by, amounts far above the normal were observed. For instance, at Marquette and Munising, in Upper Michigan, falls of snow brought the amount of precipitation up to a point much above the normal, yet along the shore of Lake Superior farther west the amounts were so much less as to cause the monthly total to fall below the average; and the deficiency was even greater at interior stations near the Wisconsin boundary. Again, the amounts in the Lower Michigan Peninsula were quite variable, ranging from a considerable excess to a corresponding deficiency, and in the watershed of western Lake Erie the precipitation was light, and, at the same time, a considerable excess occurred in the eastern portion, this precipitation being mostly in the form of snow. In the extreme western portion of the region, as well as in the Lake Champlain watershed in the eastern portion, there was an almost general deficiency in precipitation. In the portion of New York State not included in the Lake Champlain watershed ample precipitation occurred, but the principal feature regarding this precipitation was not in the total

fall, but rather in the great number of days in which snow or rain occurred. In all sections of the district the distribution of precipitation through the month was rather uniform, there being no long period of drouth at any place. It was mostly in the form of snow in the northern and eastern portions and rain in the southwest portion. The total ranged from a minimum of 0.30 inch at Iron River, Wis., to a maximum of 4.91 inches at Lake Placid, N. Y.

Snow.—The snowfall in the northern and eastern portions of the district was greater than is usual in November; and at Cleveland, Hillhouse, and Hiram, Ohio, there was more snow than in any other November of which there is a record. The snowfall in that portion of New York State lying in the district averaged 14.4 inches, and it varied from 40 inches in the Adirondack region to about 3 inches in the northwestern part of the Niagara country. In the swamps and woods of the northern Lake region snow came before the ground froze, logging operations being interfered with as a consequence. The greatest monthly fall reported in the latter section is 32.6 inches at Chatham, Mich.

At the close of the month the ground was covered with snow, the greatest depths naturally being in the regions of Lakes Superior and Champlain.

ICE IN RIVERS AND HARBORS.

Ice of consequence first appeared in the Duluth Harbor on the 21st. On the last two or three days of the month the harbor was pretty well covered and navigation was considerably impeded by ice of 6 to 8 inches in thickness. At Escanaba, by the end of the month, thin ice had formed over shallow water, but not in the channel.

Ice formed in the channel at Green Bay on the 17th, although it was broken up by vessels passing through. At the close of the month the ice was 2 inches in thickness on each side of the channel.

The rivers and ponds in the vicinity of Milwaukee were not frozen over until the last two days of the month. At Sandusky the first ice of the season was observed on the morning of the 20th, when a thin coating covered the slips along the city front. This disappeared during the day, and ice did not form again during the month. The Grasse River in New York State, emptying into the St. Lawrence, had ice along its banks during the greater portion of the month, but very little ice formed in the streams of Vermont, Ohio, Indiana, and Illinois.

NAVIGATION ON THE GREAT LAKES.

The month was free from severe windstorms, so common in the month of November on the Great Lakes, and conditions were, therefore, as a rule favorable to the movement of vessels. The storms, however, seemed to be more severe on Lake Erie than elsewhere. At Chicago not a single gale occurred during the entire month. Strong winds prevailed on Lakes Huron, Erie, and Ontario from the 10th to the 16th, and on all Lakes during the closing days of the month. The steamship *Powell Stackhouse* went hard on the rocks in Callum Bay, near the head of Lake Erie, on the 11th, and the less staunch craft were obliged to seek shelter. On the 30th the steamship *Alpena*, while entering the harbor of Alpena in a snowstorm, lost her bearings and grounded on Sulphur Island reef, but she was released 10 hours later without much damage.

MISCELLANEOUS.

Auroras were observed at Houghton, Mich., on the 18th, and at Northfield, Vt., on the 20th. There was a display of parhelia at Grand Haven, Mich., on the 20th, and at Burlington, Vt., on the 21st.

Thunderstorms were noted as follows: Grand Haven, 1st; Sandusky, Toledo, Cleveland, and Buffalo, 10th; Milwaukee and Chicago, 26th; Chicago, 27th.

Section Director W. M. Wilson, Ithica, N. Y., well describes in the following statement the unusual conditions which prevailed in his section during November:

> In all the records available, the month of November, 1910, is unrivaled as a period of unchangeable weather, with continued low temperatures, exceptionally frequent precipitation, heavy snowfall and practically no sunshine. Though the maximum temperatures of the 1st and 2d ranged generally from 50° to 60°, the remaining four weeks of the month formed a period of such uniformity of temperature as has probably not been observed for more than a quarter of a century. Throughout this period the mean daily temperatures in most parts of the State remained within 2° or 3° of the freezing point, while the daily range in temperature was very frequently less than 5°. At Buffalo, from the 11th to the 19th, inclusive, the absolute range in temperature was only 9°, from 29° to 38°. The average cloudiness, the average number of rainy days, and the average snowfall are all much greater than the corresponding averages computed for the stations within District No. 4 for the last 10 years, and, except in the case of snowfall, show a decided excess over the highest previous records, and, in view of the comments made by many observers, we are undoubtedly justified in concluding that the cloudiness and the frequency of precipitation of the current month have had no equal in any November for probably 40 years or more.

TABLE 1.—*Climatological data for November, 1910. District No. 4, Lake Region.*

Stations.	Counties.	Elevation, feet	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest	Date	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Minnesota.																				
Duluth	St. Louis	1,133	39	23.9	− 5.4	42	24	6	30	21	1.18	− 0.40	0.45	9.7	11	2	9	19	nw.	U. S. Weather Bureau.
Floodwood	do	1,257	6	21.2*	.....	39	4†	− 7	29	30*	0.87	.....	0.24	8.0	4	17*	3*	5*	.....	M. H. Schussler.
Mount Iron	do	1,510	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Oliver Iron Mining Co.
Stephen's Mine	do	1,500	3	21.2	.....	40	1	− 9	29	27	1.48	.....	0.26	7.6	8	2	6	22	w.	Do.
Two Harbors	Lake	614	16	27.6	− 3.5	51	1	3	29	25	0.72	− 0.94	0.35	5.0	4	9	14	7	nw.	George W. Watts.
Virginia	St. Louis	1,434	16	23.0	− 1.7	41	1	− 4	29	22	1.07	− 0.09	0.42	12.5	4	2	9	19	n.	Oliver Iron Mining Co.
Wisconsin.																				
Appleton	Outagamie	795	11	30.1	− 5.5	55	1	19	6†	23	2.44	+ 0.69	1.50	10.0	10	7	12	11	w.	Wm. O. Thiede.
Ashland	Ashland	647	16	28.9	− 2.8	49	1	15	30	19	0.35	− 1.18	0.28	3.5	3	5	8	17	w.	Sam Wheeler.
Bayfield	Bayfield	635	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ruben V. Ryder.
Cecil	Shawano	804	3	30.4	.....	58	2	16	3†	36	1.14	.....	0.46	4.4	7	4	13	13	nw.	Louis W. Schmidt.
Chilton	Calumet	860	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Daniel V. Jones.
Crandon	Forest	1,060	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Calvin T. H. Riggs.
Florence	Florence	1,293	19	27.8	− 2.1	46	1	18	30	18	0.91	− 1.20	0.51	4.0	5	4	2	24	nw.	Fred S. Evans.
Fond du Lac	Fond du Lac	800	24	28.7	− 5.2	51	9	10	19†	29	2.33	+ 0.62	1.45	7.0	8	4	7	19	nw.	Geo. W. Marshall.
Grand River Locks	Marquette	770	14	29.2	.....	53	7	11	3	34	2.15	+ 0.39	1.30	8.0	9	8	6	16	nw.	Jerry Parkinson.
Green Bay	Brown	617	24	30.2	− 2.3	48	9	19	6	19	2.65	+ 0.69	1.53	8.3	11	0	5	25	nw.	U. S. Weather Bureau.
Iron River	Bayfield	1,096	1	25.8	.....	47	1	9	30	26	0.30	.....	0.30	5.0	1	3	4	23	nw.	Harry C. Hall.
Kewaunee	Kewaunee	590	1	31.8	.....	52	1	19	19	22	3.85	.....	1.58	15.5	11	2	6	22	nw.	Eugene V. Kimball.
Manitowoc	Manitowoc	616	50	31.6	− 4.2	50	9	16	19	22	2.61	+ 0.53	1.13	7.0	9	1	10	19	w.	Johanna Lups.
Menasha	Winnebago	764	13	.....	.....	.....	.....	.....	.....	.....	1.55	+ 0.38	0.80	7.0	7	8	3	19	nw.	George T. Allanson.
Menomonee Falls	Waukesha	842	1	31.1	.....	57	1	16	19	26	3.46	.....	2.27	1.7	6	7	12	11	nw.	Arthur H. Christman.
Milwaukee	Milwaukee	681	40	32.6	− 3.5	58	9	19	30	23	1.63	− 0.35	0.93	0.5	9	6	8	16	w.	U. S. Weather Bureau.
New London	Outagamie	762	14	29.1	− 5.0	54	1	16	3	26	2.34	+ 0.54	0.90	6.0	7	4	2	24	nw.	August H. Pape.
Oconto	Oconto	590	19	30.8	− 3.5	49	1	19	3†	20	1.25	− 0.82	0.40	9.5	7	4	12	14	w.	William K. Smith.
Oshkosh	Winnebago	744	21	28.8	− 5.9	53	1	13	19	27	2.02	+ 0.37	1.30	3.0	5	10	14	6	w.	Evan Vincent.
Pine River	Waushara	900	15	29.0	− 5.1	50	9	15	3†	25	2.10	+ 0.48	1.08	7.7	10	0	13	17	nw.	George H. Carpenter.
Plum Island	Door	588	2	34.8	.....	52	1	24	30	18	2.12	.....	0.75	T.	8	0	5	25	nw.	John P. Whelan.
Plymouth §	Sheboygan	843	.....	30.0	.....	53	9	18	6†	24	1.99	.....	1.12	6.5	9	3	10	17	nw.	Paul O. Feldrappe.
Port Washington	Ozaukee	713	17	32.5	− 3.6	54	9	19	19†	26	2.15	+ 0.14	0.92	3.0	8	6	3	21	nw.	Richard C. Kann.
Racine	Racine	633	13	34.2	− 5.5	65	9	17	30	34	1.77	− 0.14	1.12	T.	7	7	3	20	nw.	Daniel Davis.
Ripon	Fond du Lac	935	.....	29.6	.....	58	7	15	30	35	2.07	.....	1.20	5.3	5	5	6	19	nw.	Ripon College.
Sheyboygan	Sheboygan	831	12	32.4	− 5.9	54	9	19	19	22	2.30	+ 0.44	0.86	5.5	8	2	16	12	nw.	Louis C. Meyer.
Sturgeon Bay	Door	600	12	32.6	− 2.5	50	1†	20	18	20	3.50	.....	1.49	15.0	11	2	8	20	nw.	Adam N. Dier.
Superior	Douglas	671	1	25.8	.....	43	24	8	30	18	0.78	.....	0.32	8.5	8	6	5	19	sw.	Edward Banks.
Waupaca	Waupaca	857	14	29.0	− 4.6	60	1	14	3†	30	1.81	+ 0.10	0.87	7.0	7	3	8	19	nw.	James H. Flagg.
Illinois.																				
Chicago	Cook	824	40	36.0	− 3.2	67	9	20	30	29	1.31	− 1.19	0.83	1.3	12	5	10	15	w.	U. S. Weather Bureau.
Indiana.																				
Auburn	Dekalb	874	14	31.6[b]	− 7.1	61	9	14	20	35	1.97	− 0.40	0.65	.....	9	7	2	21	nw.	Mrs. Josie B. Kuhlman.
Berne	Adams	849	.....	35.2	.....	66	9	18	20	32	3.09	.....	0.90	2.3	12	11	4	15	nw.	H. M. Reusser.
Elkhart	Elkhart	801	8	37.6	.....	66	10	24	20	28	3.18	.....	1.23	.....	10	4	11	15	nw.	Dr. Miles Medical Co.
Fort Wayne	Allen	775	14	36.2	− 4.4	67	9	16	20	35	2.32	− 0.62	0.74	2.2	9	5	4	21	nw.	Orion E. Mohler.
Hammond	Lake	598	19	37.0	− 2.2	63	10	18	6	37	1.50	− 0.81	0.88	1.5	6	10	6	14	.....	Carson W. Whitney.
Howe	Lagrange	886	5	34.3[l]	.....	64	9	22	19†	31[l]	2.10	.....	0.70	6.0	5	7[k]	6[k]	12[k]	w.[k]	James E. Zook.
South Bend	St. Joseph	726	17	34.6	− 5.0	57	1	23	18	27	1.25	− 1.57	0.28	2.5	14	6	3	21	nw.	Henry H. Swaim.
Whiting	Lake	606	.....	37.2	.....	67	9	20	6†	31	1.11	.....	0.96	T.	3	7	8	15	nw.	D. H. Boyd.
Michigan—Upper Peninsula.																				
Baraga	Baraga	623	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6[a]	0	23[a]	n.	D., S. S. & A. Ry.
Bergland	Ontonagon	1,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank McMonigal.
Blaney	Schoolcraft	.....	3	31.0	.....	47	1	19	3	17	.....	.....	.....	.....	.....	4	1	25	nw.	Dr. S. S. Hackwell.
Calumet	Houghton	1,246	22	26.7	− 3.8	42	1	8	30	23	1.82	− 0.73	0.54	21.0	16	1	2	27	nw.	E. S. Grierson.
Chatham	Alger	875	9	28.9	.....	45	1	17	30	19	3.40	.....	0.48	32.6	19	2	5	23	nw.	U. P. Experiment Station.
Deer Park	Luce	610	9	33.0	.....	48	1	19	4	19	1.65	.....	.....	12.0	6	1	0	29	nw.	Mrs. Sara E. McGaw.
Detour	Chippewa	585	9	.....	.....	.....	.....	21	19	.....	2.32	.....	0.70	11.2	5	15	0	15	nw.	Dr. F. E. Cameron.
Eagle Harbor	Keweenaw	622	11	32.0	− 4.0	45	1	23	19	14	1.58	− 0.72	0.45	12.8	11	0	6	24	nw.	John Nolen.
Escanaba	Delta	612	37	31.6	− 0.1	49	1	20	8	18	1.81	− 0.45	1.01	12.5	13	0	4	26	nw.	U. S. Weather Bureau.
Ewen	Ontonagon	1,147	9	26.9	.....	43	24	14	19	21	2.90	.....	1.00	29.0	14	1	3	26	nw.	W. B. Hatfield.
Grand Marais	Alger	610	9	31.3	.....	45	24	22	4†	15	2.72	.....	0.30	16.5	20	0	3	27	nw.	Mrs. Lena Truedell.
Houghton	Houghton	668	9	30.4	− 1.2	43	1	19	19	19	1.63	− 1.84	0.63	15.4	17	2	2	26	nw.	U. S. Weather Bureau.
Humboldt	Marquette	1,536	13	26.8	− 0.5	57	1	10	22	29	.....	.....	.....	10.0	.....	0	1	29	nw.	D., S. S. & A. Ry.
Iron Mountain	Dickinson	1,111	9	30.2[a]	.....	50[a]	1	9[a]	30	27[a]	1.12	.....	0.53	2.8	8	1	10	19	nw.	Chapin Mining Co.
Iron River	Iron	1,504	13	27.4	− 1.2	48	1	9	3	25	0.70	− 1.32	0.30	5.0	3	0	29	1	nw.	Victor D. Laing.
Ironwood	Gogebic	1,520	7	25.9	.....	45	1	15	6†	19	1.06	.....	0.27	13.0	6	2	2	26	w.	Prof. J. V. Brennan.
Ishpeming	Marquette	1,536	10	27.0[f]	− 3.3	44[f]	1	18[f]	19†	19	1.57	− 0.91	0.60	14.6	13	0	9	21	nw.	Cliv'd Cliffs Iron Co.
Isle Royale	Keweenaw	610	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John H. Malone.
Mackinac Island	Mackinac	831	10	34.2	− 0.6	50	2	22	27	17	1.24	− 1.40	0.60	11.5	8	2	14	14	n.	M. I. S. P. Com.
Maple Ridge	Delta	.....	4	29.0	.....	48	1	17	8	21	2.97	.....	0.64	20.0	8	3	3	24	n.	Herman Johnson.
Marquette	Marquette	734	30	30.7	− 1.2	46	1	22	19	15	3.44	+ 0.65	0.87	30.9	23	1	3	26	w.	U. S. Weather Bureau.
Menominee	Menominee	581	11	31.7	− 4.1	50	1	20	6†	19	1.75	+ 0.31	0.60	9.5	5	5	9	16	nw.	C. & N. W. Ry.
Newberry	Luce	773	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D., S. S. & A. Ry.
Powers	Menominee	868	11	30.6	− 1.4	48	3†	13	8	30	.....	.....	.....	8.5	.....	1	12	17	n.	C. & N. W. Ry.
St. Ignace	Mackinac	593	20	33.8	0.0	49	1	20	18	15	2.24	− 0.14	0.88	6.7	11	10	13	7	w.	D., S. S. & A. Ry.
Sault Ste. Marie	Chippewa	614	22	30.5	− 0.2	45	1	19	4	14	2.54	− 0.38	0.71	14.6	17	0	1	29	nw.	U. S. Weather Bureau.
Thomaston	Gogebic	1,347	13	25.6	− 3.5	41	24	13	17	18	1.20	− 0.85	0.40	12.0	6	0	4	26	w.	D., S. S. & A. Ry.
Victoria	Ontonagon	1,263	.....	25.2	.....	45	24	13	17†	23	1.04	.....	0.22	15.0	13	3	3	24	nw.	R. S. Schultz, jr.
Watersmeet	Gogebic	.....	1	25.4	.....	44	1	14	3	22	0.89	.....	0.14	8.3	10	3	2	25	nw.	B. N. Grant.
Wetmore	Alger	878	13	30.2	− 1.2	48	1	15	3	26	.....	.....	.....	.....	.....	0	0	30	s.	D., S. S. & A. Ry.
Whitefish Point	Chippewa	610	20	33.6	− 0.7	50	1	24	18	12	4.16	+ 3.78	0.62	22.4	22	0	0	30	nw.	Robert Carlson.
Michigan—Lower Peninsula.																				
Adrian	Lenawee	770	32	35.8	− 3.1	60	1†	17	20	33	1.74	− 1.54	0.58	1.0	5	5	1	24	nw.	B. F. Gibbs.
Allegan	Allegan	698	19	37.2	− 0.8	67	1	21	20	32	2.19	− 0.31	0.80	11.0	11	0	11	19	w.	Pere Marquette R. R.
Alma	Gratiot	750	23	34.6	− 3.0	58	9	20	20	23	2.19	− 0.46	0.50	7.5	11	3	10	17	nw.	P. M. Smith.
Alpena	Alpena	609	37	33.8	+ 0.1	51	1	26	30	14	2.32	− 0.24	0.70	17.8	17	0	2	28	nw.	U. S. Weather Bureau.
Ann Arbor	Washtenaw	930	30	34.6	− 2.5	62	9	21	20	28	2.34	− 0.24	0.50	8.5	16	6	5	19	nw.	University of Michigan.
Arbela	Tuscola	728	14	33.0	− 4.9	59	1	20	4	25	2.60	0.00	0.48	13.5	11	0	5	25	nw.	Wm. Atkin.
Battle Creek	Calhoun	822	26	34.0	− 4.3	58	10	20	20	25	1.36	− 1.03	0.37	2.0	10	3	5	22	w.	Elmer E. Sager.
Bay City	Bay	593	14	35.4	− 1.6	59	1	22	20	32	1.85	− 0.16	0.45	6.0	6	0	2	28	nw.	Pere Marquette R. R.
Benzonia	Benzie	832	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Martin S. Joiner.
Berlin	St. Clair	.....	21	33.1	− 3.3	60	1	13	20	27	1.92	− 0.72	0.40	5.5	15	0	5	25	w.	R. O. Gould.
Big Rapids	Mecosta	906	14	32.8	− 2.2	56	9	18	4	27	2.54	+ 0.06	0.48	5.0	16	3	6	21	.....	Charles Gay.
Bloomingdale	Van Buren	.....	6	35.4	.....	63	9	22	22	28	3.75	.....	1.00	13.5	13	7	3	20	nw.	John M. Haven.
Cadillac	Wexford	1,293	1	31.6	.....	58	1	20	4	25	3.64	.....	0.41	29.0	20	2	7	21	n.	A. J. Teed.
Cassopolis	Cass	903	9	34.4	.....	66	9	22	6†	30	.....	.....	.....	3.0	.....	6	1	23	sw.	Michigan Central R. R.
Charlevoix	Charlevoix	610	32	35.2	− 1.6	55	1	27	12†	21	2.95	+ 0.49	1.05	.....	7	0	1	29	nw.	Pere Marquette R. R.
Charlotte	Eaton	.....	6	33.6	.....	67	2	21	4†	36	0.86	.....	0.35	2.6	9	2	6	22	nw.	City of Charlotte.

TABLE 1.—*Climatological data for November, 1910. District No. 4*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Michigan—Lower Peninsula—Continued.																				
Cheboygan	Cheboygan	611	20	32.6	− 2.2	50	2	21	3	24	3.28	+ 0.86	1.10	14.5	6	3	8	19	sw.	E. A. Bouchard.
Clinton	Lenawee	830	20	35.8	− 2.0	62	9	15	20	30	1.51	− 1.10	0.57	T.	7	7	9	14	nw.	David Woodward.
Coldwater	Branch	984	13	35.6	− 2.7	62	9	20	20	29	1.83	− 1.00	0.58	3.2	12	7	3	20	nw.	Lake Shore & Mich. So. Ry.
Concord	Jackson		5	34.5	.....	62	9	20	22	31	1.55	.....	0.35	T.	6	6	18	6	nw.	Dr. W. N. Armstrong.
Croton	Newago	685	2	35.3	.....	55	29	21	4	25	2.49	.....	0.90	3.0	10	0	10	20	nw.	G. R. Mus. Power Co.
Detroit	Wayne	730	39	35.7	− 2.9	61	9	26	30	24	2.04	− 0.59	0.70	2.7	13	2	5	23	nw.	U. S. Weather Bureau.
Durand	Shiawassee	799	3	34.6	.....	63	9	21	20	30	0.88	.....	0.38	2.0	6	6	4	19	nw.	Grand Trunk Ry.
East Tawas	Iosco	590	13	34.6	− 1.3	52	1	22	7†	18	1.17	− 0.50	0.45	4.4	6	16	7	7	w.	Detroit & Mackinac Ry.
Bloise	Wayne	640	13	36.0	− 2.5	62	1†	16	20	25	1.87	0.00	0.65	0.9	13	3	8	19	w.	John Gilmore.
Flint	Genesee	730	21	35.1	− 0.8	60	9	21	20	30	2.05	− 0.41	0.45	5.0	15	4	5	21	w.	Wm. L. Fisher.
Frankfort	Benzie	589	6	35.3	.....	52	2	24	30	19	2.45	.....	0.50	4.0	8	0	0	30	w.	Capt. Geo. Morency.
Ganges	Allegan	665	1	36.0	.....	58	9	24	20	20	1.69	.....	0.39	4.0	11	3	3	24	nw.	H. H. Hutchins.
Gaylord	Otsego	1,367	5																	Michigan Central R. R.
Gladwin	Gladwin	794	14	33.6	− 1.6	65	1	16	20	27	1.11	− 0.73	0.40	10.6	6	10	6	14	nw.	Geo. R. Smith.
Grand Haven	Ottawa	628	29	35.4	− 2.6	55	9	27	30	20	1.91	− 0.62	0.43	5.5	19	0	7	23	nw.	U. S. Weather Bureau.
Grand Rapids	Kent	707	21	35.0	− 3.1	60	9	26	30	21	1.34	− 1.19	0.29	4.0	14	0	9	21	nw.	Do.
Grape	Monroe	625	20	35.8	− 2.9	63	9	17	20	31	1.72	− 0.84	0.62	2.3	9	6	7	17	w.	Joseph W. Morris.
Grass Lake	Jackson	989	4	33.8	.....	59	9	19	20	26	2.86	.....	0.94	10.0	10	9	0	21	nw.	Menzo Conklin.
Grayling	Crawford	1,147	21	31.6*	− 2.8	48	5	20	5†	28*	3.10	+ 0.61	0.60	31.5	11	5	15	10	nw.	Dr. Oscar Palmer.
Harbor Beach	Huron	635	22	35.5	− 1.7	60	1	20	15	21	1.10	− 1.04	0.35	4.0	8	3	8	19	w.	Pere Marquette R. R.
Harrison	Clare	1,159	17	31.8	− 1.6	56	2	21	12	24	1.61	− 0.55	0.78	8.0	....	3	0	27	nw.	Do.
Harrisonville	Alcona	616	26	33.9	− 1.0	54	1	22	12	20	1.81	− 0.74	0.60	11.5	12	3	9	18	nw.	Dr. D. W. Mitchell.
Hart	Oceana	698	18	34.2	− 3.8	56	1	22	30	28	1.98	− 0.36	0.62	4.0	7	0	3	27	sw.	Pere Marquette R. R.
Hayes	Huron	620	20																	C. F. Leipprandt.
Highland	Oakland	830	18								2.57	− 0.17	0.60	13.2	11					A. D. De Garmo.
Hillsdale	Hillsdale	1,150	13	34.0	− 3.4	59	9	20	20	26	0.76	− 1.88	0.30	4.5	6	7	4	19	nw.	Prof. C. L. Herron.
Holland	Ottawa	610	4	35.0	.....	60	9	21	11	24	1.93	.....	0.36	8.0	13	1	9	20	nw.	City of Holland.
Howell	Livingston	924	18								2.27	− 0.01	0.90	5.4	5				nw.	Frank Sharp.
Ivan	Kalkaska		21	31.4	− 2.1	48	9	17	20	24	3.69	+ 1.02	0.67	29.3	22	1	12	17	nw.	O. L. Giddings.
Jackson	Jackson	927	13	35.6	− 2.7	64	9	19	20	32	1.68	− 0.59	0.60	4.1	10	7	12	11	nw.	City of Jackson.
Jeddo	St. Clair	667	21	34.2	− 2.5	60	1	22	20	19	2.34	− 0.14	0.42	6.9	15	1	5	24	nw.	William Bice.
Kalamazoo	Kalamazoo	955	34	35.4	− 2.2	56	4	20	19†	30	2.24	− 0.60	0.43	11.5	15	5	10	15	nw.	Kalamazoo Asylum.
Lansing (Agr. Col.)	Ingham	820	46	34.0	− 1.8	63	9	21	20	27	1.37	− 1.88	0.43	5.9	15	2	5	23	nw.	U. S. Weather Bureau.
Lansing	do	881	23	34.8	− 2.3	64	9	22	20	29	1.47	− 0.87	0.35	6.1	15	2	5	23	nw.	State Board of Health.
Lapeer	Lapeer	827	11	34.0	− 3.5	60	2	22	4†	23				3.5	....	0	17	13	nw.	Michigan Home.
Ludington	Mason	586	12					25	3	....	2.35	+ 0.44	0.72	6.0	9	4	10	12	nw.	Pere Marquette R. R.
Luther	Lake	1,028	0	32.8	.....	54	9	21	3	24	2.78	.....	0.52	12.6	20	2	4	24	w.	John W. Nicholson.
Mackinaw	Cheboygan	592	14	35.6	+ 0.2	58	5	20	2†	26	1.50	− 1.34	0.40	15.0	6	0	1	29	nw.	Grand Rapids & Ind. Ry.
Mancelona	Antrim	1,121	14					18	3†	....	4.37	+ 1.63	0.80	36.7	16	4	0	26	nw.	Do.
Manistee	Manistee	600	13	35.3	− 1.4	53	1	22	30	22	4.34	+ 2.05	1.10	2.0	7	0	10	20	nw.	Pere Marquette R. R.
Midland	Midland	604	11	34.6	− 2.3	57	1†	20	4†	26	.....	.....	.....	6.0	....	3	7	20	s.	Do.
Montague	Muskegon	660	7																	Gerard A. Whitbeck.
Morenci	Lenawee	811	3	35.9	.....	62	9	16	20	28	2.09	.....	0.56	4.0	9	8	3	19	nw.	George J. Tripp.
Mount Clemens	Macomb	615	10			60	1				2.26	− 0.05	0.40	1.7	13	5	7	18	w.	Water Works.
Mount Pleasant	Isabella	826	11					7	29	....				7.0	....	13	2	15	w.	Pere Marquette R. R.
Muskegon	Muskegon	587	14	35.9	.....	56	1	27	17	17	1.50	.....	0.40	2.0	7	1	2	27	n.	Grand Rapids & Ind. Ry.
Old Mission	Grand Traverse	858	16	33.4*	− 2.9	48	1	25	30	13*	4.31	+ 1.86	0.75	17.8	18	0	4	26	n.	E. O. Ladd.
Olivet	Eaton	934	20	33.3	− 3.3	59	9	21	20	24	1.26	− 1.37	0.53	6.8	13	7	0	23	w.	Prof. G. A. Knapp.
Omer	Arenac	616	11													2	11	17	nw.	Detroit & Mackinac Ry.
Onaway	Presque Isle	826	7	31.9	.....	68	1	20	13	37	3.75	.....	1.40	18.2	8	0	0	30	n.	Do.
Ovid	Clinton	760	20																	Dr. B. L. Bates.
Owosso	Shiawassee	731	13	36.0*	− 0.9	62	9	24	4	27*	1.76	− 0.39	0.34	6.5	12	1	12	12	nw.	Owosso Sugar Co.
Petoskey	Emmet	660	20	34.4†	− 0.9	49	1	23	4	20†	0.88	− 2.09	0.30	7.0	12				nw.	Grand Rapids & Ind. Ry.
Plymouth	Wayne	725	13	34.6	− 4.3	67	1	12	20	39	1.76	− 0.46	1.00	T.	3	11	0	19	nw.	Pere Marquette R. R.
Pontiac	Oakland	935	10	34.9	− 2.6	66	1	20	20	27	1.65	− 0.78	0.27	1.5	12	5	7	18	nw.	Fred W. Shaw.
Port Austin	Huron	618	14																	Pere Marquette R. R.
Port Huron	St. Clair	639	35	34.8	− 2.0	60	1	24	20	26	1.80	− 0.87	0.66	4.7	15	0	2	28	nw.	U. S. Weather Bureau.
Reed City	Osceola	1,033	14	34.0	− 0.8	55	10	21	4†	27	1.35	− 0.71	0.30	7.9	8	0	0	30	nw.	Pere Marquette R. R.
Roscommon	Roscommon	1,141	6																	State Forestry Com.
Saginaw	Saginaw	601	8	35.2	− 3.9	59	1	21	13	27	1.97	− 0.05	0.50	11.8	9	2	14	14	w.	Postmaster.
Saginaw W. S.	do	601	15	34.9	− 2.6	58	1†	21	20	29	1.93	− 0.38	0.57	9.6	17	2	8	20	nw.	Robert B. Hudson.
St. James	Charlevoix	681	4	33.4	.....	47	1	26	30	17	2.31	.....	0.56	3.5	11	0	6	24	nw.	Rev. N. Wilhelm.
St. Joseph	Berrien	593	23	37.0	− 3.4	60	9	17	2	27	2.32	− 0.60	0.50	2.0	7	5	1	24	nw.	City of St. Joseph.
Sandusky	Sanilac	790	1	34.5	.....	66	1	22	5	29	0.80	.....	0.24	6.0	10	0*	2*	27*	w.	Pere Marquette R. R.
Saranac	Ionia	639	15	34.7	− 1.6	63	9	19	4†	29	1.58	− 1.30	0.28	2.5	10	4	1	25	nw.	John Wallington.
South Haven	Van Buren	585	14											T.	....	4	13	13	nw.	Mrs. M. E. De Diemar.
Stanton	Montcalm	880	17																	City of Stanton.
Thornville	Lapeer	975	33	36.6	− 1.0	72	1	22	4	34	3.22	+ 0.47	0.50	22.0	15	0	10	20	nw.	Dr. J. S. Caulkins.
Traverse City	Grand Traverse	588	13																	Grand Rapids & Ind. Ry.
Vassar	Tuscola	641	9	34.6	.....	59	1	20	4	26	2.50	.....	0.40	7.2	11	0	18	12	nw.	Pere Marquette R. R.
Wasepi	St. Joseph	842	13	34.9	− 3.2	60	9	22	4†	25	1.88	− 0.79	0.50	6.0	13	6	2	22	sw.	Chas. A. Palmer.
Webberville	Ingham	884	8	34.0	.....	63	9	20	20	21	2.29	.....	0.49	8.0	11	3	6	21	nw.	I. R. Wadsworth.
West Branch	Ogemaw	973	7													7	4	19	se.	Michigan Central R. R.
Woodlawn	Montmorency		8	29.8		45	1	15	4†	27	4.64	.....	1.00	41.5	17	1	6	23	nw.	T. C. Mathews.
Ypsilanti	Washtenaw	736	23	35.0	− 2.0	62	9	18	20	32	2.32	− 0.66	0.60	2.6	15	0	20	10	nw.	Orin J. Bemiss.
Ohio.																				
Akron	Summit	1,081	23	34.9	− 5.1	62	1	21	20	29	1.58	− 1.10	0.50	5.5	11	3	7	20	w.	Prof. C. R. Olin.
Benton Ridge	Hancock	800	17	36.2	− 4.2	65	9	22	20	34	2.77	+ 0.24	0.56	5.0	11	4	7	19	nw.	J. W. Powell.
Bowling Green	Wood	670	30	35.8	− 3.5	65	9	18	20	32	2.06	− 0.90	0.60	5.0	9	7	5	18	nw.	G. C. Housekeeper.
Bucyrus	Crawford	1,000	15	33.0	− 6.1	65	9	16	20†	37	1.95	− 0.07	0.90	1.0	5	8	3	19	s.	James R. Hopley.
Cleveland (1)	Cuyahoga	762	30	37.1	− 3.3	63	9	25	20	28	3.08	+ 0.33	0.80	11.3	19	1	0	29	w.	U. S. Weather Bureau.
Cleveland (2)	do	754	13	36.6	− 4.4	63	1	22	20	29	3.41	+ 1.58	0.80	12.0	14	2	1	27	nw.	Rev. F. L. Odenbach, S. J.
Conneaut	Ashtabula	675	....	37.0	.....	64	1	27	7†	24	3.85	.....	0.66	7.0	10	1	6	23	nw.	E. L. Ransom.
Defiance	Defiance	712	16	35.4	− 4.1	65	8	15	20	32	1.51	− 1.09	0.58	1.4	9	8	2	20	sw.	John F. Hellshorn.
Findlay	Hancock	776	21	35.0	− 5.1	66	9	17	20	35	2.31	− 0.46	0.83	1.0	9	9	15	6	nw.	Dr. E. A. Moser.
Fremont	Sandusky	628	9	36.8	.....	62	1†	20	20	31	2.22	.....	0.74	0.2	9	8	3	19	nw.	E. Stanley Thomas.
Hedges	Paulding	725	16	35.8	− 3.6	64	9	17	20	31	1.98	− 0.35	0.51	5.0	12	6	7	17	sw.	Charles Stutzman.
Hillhouse	Lake	907	18	35.0	− 4.2	66	1	16	20	27	4.60	+ 1.54	1.25	23.0	15	1	7	22	w.	J. W. Doncaster.
Hiram	Portage	1,260	26	34.2	− 4.6	61	1	19	7	27	3.22	+ 0.10	0.78	21.0	14	1	8	21	nw.	Prof. G. H. Colton.
Hudson	Summit	1,153	49	34.6	− 5.0	64	2	15	20	33	3.35	+ 0.30	0.93	13.0	18	3	8	19	sw.	Dr. W. I. Chamberlain.
Lima	Allen	875	11	35.5	− 5.9	61	9	23	6†	26	2.47	+ 0.63	0.63	0.1	8	11	3	16	w.	Miss Ollie De Long.
Medina	Medina	944	22	34.5	− 6.3	65	9	15	20	39	1.89	− 0.92	0.80	6.0	8	4	2	24	w.	F. W. Clark.
Montpelier	Williams	880	18	35.1	− 2.7	63	9	17	20	29	2.02	− 0.91	0.57	1.5	7	....	....	....	w.	G. L. Laser.
Napoleon	Henry	680	24	37.0	− 3.1	65	9	18	20	30	2.43	− 0.22	0.69	1.5	12	7	2	21	nw.	A. C. Senter.
New Bremen	Auglaize	1,038	17	35.8	− 5.5	67	9	20	7	32	2.20	− 0.73	0.68	T.	7	7	9	14	nw.	Miss Lillian Grothaus.
North Royalton	Cuyahoga	1,000	18	34.5	− 5.3	62	1	18	20	33	3.60	+ 0.98	0.88	16.5	14	6	6	18	w.	W. S. Edgerton.
Norwalk	Huron	719	24	35.6	− 4.9	67	9	20	20	38	1.68	− 0.78	0.45	4.0	6	2	8	20	nw.	Dr. Albert Sheldon.

TABLE 1.—*Climatological data for November, 1910. District No. 4*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Ohio—Continued.																				
Oberlin	Lorain	855	35	35.8	— 4.1	65	1	16	20	38	1.85	— 0.66	0.40	.....	9	6	6	18	w.	Prof. F. F. Jewett.
Ottawa	Putnam	720	18	35.8	— 5.2	65	9	18	20	33	1.90	— 0.84	0.44	1.2	8	1	6	23	w.	Prof. J. T. Maidlow.
Sandusky	Erie	629	33	36.8	— 4.0	65	9	25	20	29	1.55	— 1.19	0.41	0.8	13	4	4	22	w.	U. S. Weather Bureau.
Tiffin	Seneca	775	28	36.6	— 3.8	64	9	22	20	29	2.02	— 0.71	0.62	2.2	12	6	5	19	w.	Prof. T. H. Sonnedecker.
Toledo (1)	Lucas	769	39	37.2	— 2.5	64	9	25	20	27	2.22	— 0.43	0.75	2.2	16	6	3	21	w.	U. S. Weather Bureau.
Toledo (2)	....do	606	6	36.3	.....	64	9	24	20	26	1.77	.....	0.64	1.0	15	6	4	20	nw.	J. A. Krance, S. J.
Upper Sandusky	Wyandot	854	27																	Prof. R. J. Kiefer.
Vickery	Sandusky	588	17	36.3	— 3.7	68	9	19	20	38	1.82	— 0.45	0.57	3.2	12	3	7	20	w.	John W. Barr.
Wauseon	Fulton	780	38	34.5°	— 2.6	64b	1†	16°	20	29°	2.61	— 0.49	0.69	6.5	17	3°	6°	18°	nw.	Thomas Mikesell.
Wellington	Lorain	856	16	36.2	— 4.3	65	9	17	20	37	2.06	— 0.43	0.70	3.5	11	5	2	23	nw.	W. D. Warren.
Willoughby	Lake	649	16								3.63	+ 1.16	0.54	6.0	14	1	3	26	w.	C. J. Richardson.
Pennsylvania.																				
Erie	Erie	713	37	37.4	— 3.8	60	1	28	18	24	3.45	— 0.02	0.71	14.7	20	0	4	26	w.	U. S. Weather Bureau.
New York.																				
Adams Center	Jefferson	540	19	34.6	— 0.1	62	1	17	21	22	3.44	— 0.04	0.40	25.5	20	3	4	23	n.	A. E. Cooley.
Angelica	Allegany	1,340	27	32.9	— 3.0	59	1	15	21	26	2.35	— 0.11	0.50	19.0	17	0	3	27	w.	Charles P. Arnold.
Appleton	Niagara	270	19	37.4	— 2.6	67	1	22	21	31	2.02	— 0.46	0.45	10.3	10	0	6	24	nw.	H. A. Van Wagoner.
Auburn	Cayuga	715	41	35.0	— 3.4	61	1	20	21	24	3.96	+ 0.93	0.90	21.0	16	4	13	13	n.	A. H. Underwood.
Avon	Livingston	585	15	35.1	— 3.4	61	1	20	21	31	2.30	+ 0.25	0.65	8.8	9	0	6	24	.....	W. G. Markham.
Blue Mountain Lake	Hamilton	1,750	10								2.47	— 0.33	0.47	14.9	14	2	4	24	w.	B. F. Merwin.
Brockport	Monroe	537	14	35.6	— 2.4	61	1	22	21	26	2.68	— 0.07	0.70	11.0	18	0	5	25	w.	W. H. Lennon.
Buffalo	Erie	767	59	36.1	— 3.2	61	1	25	21	21	2.89	— 0.46	0.89	3.6	18	0	7	23	w.	U. S. Weather Bureau.
Canton	St. Lawrence	448	16	32.0	— 1.9	59	1	14	21	21	2.91	— 0.50	0.61	15.0	19	1	7	22	sw.	Do.
Cape Vincent	Jefferson	246	5																	Verne M. Rice.
Carvers Falls	Washington	243	12	37.0	+ 2.5	60	5	18	21	31	1.85	— 0.37	0.80	8.0	4	11	6	13	n.	Washburn Fancher.
Chazy	Clinton	151	10	34.2	+ 0.3	55	3	18	21	23	1.58	+ 0.06	0.52	4.5	8	4	4	22	n.	W. R. North.
Dannemora	....do	1,490	5	30.0	.....	53	1†	15	21	23	1.59	.....	0.37	8.6	14	2	4	24	w.	W. N. Thayer.
Elba	Genesee	700	11	33.2	— 4.8	61	1	12	21	28	3.90	+ 1.83	1.40	16.0	10	6	10	14	sw.	Jos. S. Wilford.
Fayetteville	Onondaga	530	9	35.2	.....	59	1	11	21	27	3.16	+ 0.55	0.81	17.0	17	2	6	22	w.	Dana H. Wells.
Gabriels	Franklin	1,729	8	28.8	.....	54	1	1	21	33	2.41	.....	0.60	19.0	20	1	3	26	nw.	Sanatorium.
Harkness	Clinton	622	8	32.7	.....	57	1†	16	21	27°	1.43	.....	0.40	8.2	9	16	3	11	w.	J. W. Harkness.
Hemlock Lake	Livingston	900	12	35.0	— 3.9	59	1	19	21	21	1.94	+ 0.22	0.65	6.5	6	1	5	24	sw.	D. H. Westbury.
Hunt	....do	1,321	11	34.7	— 3.9	60	1	16	21	27	2.21	+ 0.35	0.72	4.0	6	0	14	16	nw.	W. S. Barrager.
Ithaca	Tompkins	928	32	35.0	— 2.6	59	1	21	20	25	2.85	+ 0.27	0.73	11.7	19	0	4	26	nw.	U. S. Weather Bureau.
Keene Valley	Essex	1,000	12	32.5	— 0.8	56	1	16	18†	30	2.45	— 0.17	0.54	11.2	13	5	3	22	nw.	E. R. Wells.
King Ferry	Cayuga		10								2.05	— 0.14	0.60	12.5	17	1	3	26	nw.	Lucius A. Goodyear.
Lake George	Warren	350	13	35.8	— 1.2	53	2	15	21	23	2.26	— 0.81	0.72	9.4	9	2	11	17	n	Charles Forsell.
Lake Placid Club	Essex	1,864	2	26.4	.....	49	1‡	3	21	30	4.91	.....	0.80	40.6	20	1	15	14	nw.	Henry van Hoevenberg.
Le Roy	Genesee	920	20	34.3	— 3.1	62	1	19	21	27	3.10	+ 0.53	0.62	18.4	18	1	4	25	nw.	F. W. Ball.
Lockport	Niagara	650	23	35.2b	— 3.6	59	1‡	21	21	21b	2.36	+ 0.01	0.73	6.0	12	1	2	27	nw.	J. E. Wakeman.
Lowville	Lewis	900	43	31.1	— 3.4	57	1‡	6	21	32	1.93	— 1.51	0.47	.....	11	6	10	14	w.	Charles J. Rice.
Lyndonville	Orleans		14																	Milton St. John.
Moira	Franklin	200	10	32.2	— 2.4	60	1	18	21	28	2.24	— 0.24	0.45	13.7	14	5	10	15	w.	C. E. McBride.
Nehasane	Hamilton	1,750	2	28.2	.....	52	1	−1	21	34	3.24	.....	0.35	27.0	22	4	8	18	w.	A. C. Heyburn.
North Lake	Herkimer	1,822	9	30.2	— 1.5	53	1	9	21	29	2.83	— 1.72	0.75	15.0	9	6	3	21	sw.	H. A. Paull.
Ogdensburg	St. Lawrence	175	26	34.2	— 1.4	59	1	17	21	21	1.98	— 0.56	0.47	8.4	14	11	13	6	ne.	State Hospital.
Old Forge	Herkimer	1,733	2	30.8	.....	57	9	5	21	35	3.66	.....	0.45	24.0	21	3	4	23	w.	Stuart W. Nelson.
Oswego	Oswego	335	40	36.2	— 2.9	61	1	20	21	24	4.50	+ 1.09	0.71	12.7	21	0	3	27	nw.	U. S. Weather Bureau.
Otto	Cattaraugus	1,410	6	32.8	.....	64	1	22	27	26	1.78	.....	0.36	.....	12	10	8	12	.....	William Winke.
Palermo	Oswego	400	51								4.14	+ 0.53	0.58	27.4	21	1	6	23	sw.	E. B. Bartlett.
Perry City	Schuyler	1,038	30	33.3	— 2.6	59	1	18	21	32	2.95	+ 0.35	0.68	14.6	18	0	3	27	nw.	W. H. Jeffers.
Philadelphia	Jefferson	485	4	33.0	.....	58	1	12	18	25	3.29	.....	0.71	23.5	15	1	10	19	w.	E. D. Babcock.
Plattsburg	Clinton	170	60																	T. P. Davison.
Potsdam	St. Lawrence	300	34	33.7	0.0	62	2	17	21	28	2.18	— 0.04	0.67	11.1	13	9	0	21	w.	A. E. Sutuerland.
Raquette Lake	Hamilton		2	30.8	.....	52	4	8	21	27	2.63	.....	0.46	23.1	16	0	4	26	nw.	R. J. Dunning.
Rochester	Monroe	523	81	35.8	— 2.1	64	1	26	21	27	3.07	+ 0.31	0.87	15.7	19	0	2	28	w.	U. S. Weather Bureau.
Romulus	Seneca	719	18	36.0	— 3.2	62	1	22	21	27	1.38	— 1.06	0.60	7.6	8	2	4	24	nw.	John H. Coryell.
Shortsville	Ontario	740	11	34.9	— 3.5	62	1	21	21	25	2.16	+ 0.32	0.67	5.5	11	2	7	21	sw.	C. H. Latting.
Skaneateles	Onondaga		15								4.09	+ 0.80	0.73	.....	23					Edward Conron.
Syracuse	....do	507	8	34.6	— 4.1	59	1	19	21	20	2.19	— 0.52	0.38	15.3	23	0	6	24	w.	U. S. Weather Bureau.
Ticonderoga	Essex	344	12	33.6	— 2.4	44	9	15	21	23b	1.29	— 1.71	0.50	6.0	3	9	3	18	n.	Eva M. De Lano.
Trudeau	....do	1,620	17																	Daniel Smith.
Tupper Lake	Franklin	1,522	10	30.2	.....	53	1†	2	21	36	3.58	.....	1.20	17.0	16	3	1	26	w.	Aaron W. Maddox.
Volusia	Chautauqua	1,167	11	32.8	— 4.6	57	1	23	21	20	4.89	+ 1.37	0.68	33.0	18	1	4	25	w.	Benjamin Breads.
Wanakena	St. Lawrence		0	30.6	.....	55	1†	4	21	31	2.33	.....	0.28	21.0	16	3	5	22	nw.	J. Otto Hamele.
Watertown	Jefferson	737	18	34.2	— 1.8	60	1	18	18†	20	4.12	+ 0.71	0.60	14.0	21	3	2	25	sw.	H. P. Dunlap.
Wedgewood	Schuyler	1,430	21	32.6	— 3.8	60	1	20	20	25	2.56	+ 0.05	0.52	19.5	17	1	10	19	nw.	Orlando F Corwin.
Westfield	Chautauqua	837	14	34.7°	— 4.9	60	1	22	21	19°	3.31	— 0.11	0.43	8.5	14	.....	.....	.....	.....	John R. Rogers.
Youngstown	Niagara	.....	8	.....	.....	.....	.....	.....	.....	.....	1.58	.....	0.70	3.0	7	1	22	7	w.	B. V. Brookins.
Vermont.																				
Burlington	Chittenden	404	3	33.4	— 0.3	55	2	14	21	22	2.43	— 0.15	0.80	16.5	16	0	6	24	nw.	U. S. Weather Bureau.
Cornwall	Addison	507	17	34.6	— 1.5	56	2	18	21	21	2.59	— 0.67	1.00	13.0	12	5	8	17	n.	C. H. Lane.
Enosburg Falls	Franklin	601	19	32.6	— 1.9	59	1	8	21	31	2.63	— 1.12	0.66	11.0	15	3	6	21	nw.	L. Howe Pomeroy.
Northfield	Washington	876	24	32.0	0.0	53	1	11	21	31	2.19	— 0.41	1.06	13.3	12	2	7	21	n.	U. S. Weather Bureau.
Rutland	Rutland																			H. L. Hindley.
Wells	....do	750	19	32.4	— 2.5	56	2	16	21	22	3.06	— 0.68	0.86	15.5	10	4	8	18	sw.	E. R. Pember.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 4, Lake Region.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Minnesota.																																
Duluth	Lake		T.		.45	.02	T.			.03	T.		T.	.10	.05			T.			.06	.02	.21	.20			.01	.01		T.	T.	1.18
Floodwood	do		T.		.24										.23						17		.23								0.87
Mount Iron	do																															
Stephens Mine	do		T.	T.	.20	T.	T.	T.	.04	.04	T.			T.	.16						.13	.02	.15	.20		T.		T.	T.		T.	1.03
Two Harbors	do				.05				T.						.17						T.	T.	.15	.35							0.72
Virginia	do	T.	T.		.16	T.	T.	T.	T.	T.	T.	T.		T.	.27					T.	T.	.22		.42					T.		1.07
Wisconsin.																																
Appleton	Fox	.56	.02			.04	T.				.01				.10			T.	T.			.05	T.	.04	.13			1.50			.01	2.44
Ashland	Lake		T.		.05	T.		.02		T.					.28								T.	T.				T.			T.	0.35
Bayfield	do																															
Cecil	Fox	.28	T.		T.	T.				T.					.08			T.	T.				.08	.08	.10			.40			.02	1.14
Chilton	do																															
Crandon	do																															
Florence	Menominee	.51			T.	T.	T.	T.	T.	T.	T.	T.			.10							10		10				.10				0.91
Fond du Lac	Fox	.20	.30			.06									.14							.03		T.	.10			1.45	T.		.02	2.33
Grand River Locks	do	.30	T.			.14					.06				.10							.07		.03	.09			1.30	.04		T.	2.15
Green Bay	Lake	.56	T.		.09	.09				.02					.06						.04	T.	T.	.06	.18		.02	1.51			.02	2.65
Iron River	do				T.	T.									.30								T.								0.30
Kewaunee	do	.72		.10	.14					.10					.20							.12	.05	.02	.40			1.58			.42	3.85
Manitowoc	do	.63	.04		.06										.30						.10		.02	T.	.17			1.13			.13	2.61
Menasha	Fox	.15	.07							T.					.17							.17		.06	.04			.89			T.	1.55
Menomonee Falls	Lake	.54	T.												.10			T.				.08		.18	.28			2.27			T.	3.46
Milwaukee	do	.24	T.		.14					T.					.04		T.	T.	T.		.04	T.	T.	.13	.10		.13	.80	T.		.01	1.63
New London	Fox	.62	.15	T.	T.					.06					.38						T.	.08		T.	.15			.90				2.34
Oconto	Lake	.40			.30										.05						T.		T.	T.			.15				.20	1.25
Oshkosh	Fox	*	.37			.10					.03				.10						T.		T.	.10	T.			1.30				2.02
Pine River	do	.50	.06		T.	.03				T.	.03				.15			T.	T.		.07	T.	T.	.02	.12			1.08			.02	2.10
Plum Island	Lake	.75	.32			.12									.07							.15		.19	.21			.31				2.12
Plymouth	do	.46	T.		T.	.12					.04				.04						T.	.04		.04	.10			1.12	T.		.03	1.99
Port Washington	do	*	.52			.09									.20							.08		.06	.12			.92	.10			2.15
Racine	do	.11	T.			.04									T.			T.				.08		.11	.16			1.12	.12		T.	1.77
Ripon	Fox	.27		.30		.02									.15							.03						1.20			.08	2.07
Sheboygan	Lake	.40	T.			.20				T.					.20			T.				.12		.16	.23			.86	.10		T.	2.30
Sturgeon Bay	do	.74	.03	.21		.05					T.				.05							.14		.05	.43	T.	T.	.80	.60	T.	.31	3.50
Superior‖	do				.13	.02				T.	.01				.20						.06	.02		.32			.02				0.78
Waupaca	Fox	.54	T.		.02										.17						.03			.06	.10			*	.87		T.	1.81
Illinois.																																
Chicago	Lake	.08	.01	.01	.02	T.				.01	.02				T.	T.		T.	T.		.04			.02	.12		.16	.68			.11	1.31
Indiana.																																
Auburn	Maumee		.17	.03		.05					.47	T.	T.			T.						T.				.23		.17	.65	.08	.12	1.97
Berne	do	.27	.08	.02		.19					.51	T.			.01	.03						T.		.05	.13			.90	.85		.05	3.09
Elkhart	St. Joseph					.01					1.23				.12	.27						.05		.29	.12			.22	.32		.35	3.18
Fort Wayne	Maumee	.20	.09	.03		.17	T.	T.			.52	T.			T.	T.				T.		T.		T.	.08			.24	.74	T.	.19	2.32
Hammond	Lake Michigan	.12	T.	.10			T.													T.				T.	.18			.88	.12	T.	.10	1.50
Howe	St. Joseph		.70				.53				.04																.23				.60	2.10
South Bend	do		.10	.02		.06	.02				.10	T.	.01			.16			T.	T.			.02			.06	.10		.20	.28	.04	.08	1.25
Whiting	Lake Michigan	T.	T.	.11							T.				T.			T.								.04			.90		T.	1.11
Michigan—Upper Peninsula.																																
Barnga	Lake						.20					.10												.20								
Bergland	Ontonagon						T.		T.		T.	.40	T.											.03				T.	T.	T.	.03	
Blaney	Manistique	.70																														
Calumet	Lake		.04	.24	.04	T.	.12	.08	T.	.18	.04	.08	.04		.04		.04	.02	T.	T.	T.	T.		.54				.06	.06	T.	.20	1.82
Chatham	do	.18	.48	.17	T.		.21	.29	.02	T.	.26	.28	.18		.03	.06	.04		.04			.06		.22				.28	.12	.26	.22	3.40
Deer Park	do	.40	T.	.40	.20	T.	T.				.05		T.		T.	T.	T.							T.					.40	.20	T.	1.65
Detour	St. Marys		.35	T.			.20	T.				T.											.27		.30			.70	.30	.20	2.33
Eagle Harbor	Lake		T.	T.	T.	.05	.25	.07		T.	.04	.16	T.	T.	.03		.05	.18				T.		.45			T.	.20	T.	T.	.10	1.58
Escanaba	do	.32	T.		.07	.03		.04		T.	T.	.02	T.		.01	T.			T.		.03	.02	T.	.10	.14		T.	.91	.10	T.	.02	1.81
Ewen	Ontonagon		.10		.10	.10	.30	.10	.10	.20	.20	.10	.10	.10				T.				T.	T.	.30	T.		T.		T.	.10	1.00	2.90
Grand Marias	Lake	.10	.10	.05	.02	.15	.10	.15		.02	.10	.20	.10	.08	.10	.15						.10		.20				.20	.30	.30	.20	2.72
Houghton	do		.02	.01	.01	.02	.13	.08	T.	.13	.08	.10	.02		.05	T.	.03	T.	T.		.01	T.		.63		T.		.09	T.	.02	.20	1.63
Humboldt	Escanaba																															
Iron Mountain	Menominee	.53						.10							.13							.10	T.	.04				.10	.03		.09	1.12
Iron River	do	T.			T.	T.	T.	T.	T.		T.	T.	T.				T.				T.	T.	T.	.30			.20	T.	.30	T.	T.	0.70
Ironwood	Lake		.10	T.	.27		.10	T.	T.		T.	T.	.17		T.	.21	T.				T.	T.		T.					T.	.21	1.06
Ishpeming	Escanaba	.03	T.	.01	T.	T.		.10		.10	.01	.30	.07		.05	T.			T.			.05		.15		T.		.07	.03		.60	1.57
Isle Royale	Lake																															
Mackinac Island	do	.06	.01			.02	T.	.60			T.	T.		T.		T.					T.				.04		T.	T.	.15	.20	.16	1.24
Maple Ridge	do	.64						.20				.40	.40											.23				.30	.40		.40	2.97
Marquette	do	.19	.18	.24		.01	.01	.10	T.	.02	.25	.42	.10	.05	.13	.27	.03		.01		.01	.04		.04		.02		.21	.03	.36	.72	3.44
Menominee	Menominee	.45		T.						T.					T.							.25			.35			.60			.10	1.75
Newberry	Tequamenon																															
Powers	Lake	.05																				.20						.40		.20		
St. Ignace	do	.09	.88			.28	T.		.13		T.	.04							T.	T.		.04	.06	.28		T.		T.	.41	.02	.01	2.24
Sault Ste. Marie	St. Marys	.34	.05		.03	.29	.04	.04	T.		.03	.02			T.	.01	T.	.04				.24	T.	.38		.01		.12	.59	.22	.09	2.54
Thomaston	Lake	T.	T.	.15		T.	.30	.05			.20	.10																T.			.40	1.20
Victoria	Ontonagon		T.	.01	.05	.01	.07	.01		.12	.04	.14	T.	T.	.14	T.	.02				T.	T.		.22				.06		T.	.15	1.04
Watersmeet	do	.14	T.	T.	.06	T.	T.	T.	T.	.06	.04	.13	.05		.09	T.	T.				T.	.06	T.	.13				T.	T.	T.	.13	0.89
Wetmore	Lake																															
Whitefish Point	do	.44	.45	.15		.21	.18	.08	.04		.16	.09	.04		.02	.04		.03	.04			.22	.02	.23		T.	.10	.40	.30	.02	.30	4.16
Michigan—Lower Peninsula.																																
Adrian	Raisin	.31				T.					.58													.23				.52			.10	1.74
Allegan	Kalamazoo	.21	.18	.21		.11						.02	T.		.11							.08		.11	.19			.17			.80	2.19
Alma	Saginaw	.17	.04	.08		.33						T.			.12			T.	T.			T.		.15	.40	.04		.11	.50		.25	2.19
Alpena	Lake	.25	.03			.16	T.	.02			.25	.05	.05	.01	.01	.02	T.	T.	T.			.08		.18	.12	T.		.03	.61	.34	.11	2.32
Ann Arbor	Huron	.12	.11	.04		.05	.05				.50	T.			.10	.05		T.	T.			.15	.05	.25	.25			.09	.43	.05	.05	2.34
Arbela	Saginaw		.18	.13				.07			.10				.26							.12		.27	.48				.40	.26	.33	2.60
Battle Creek	Kalamazoo	.05	T.			.10	T.				.10	T.	.10		T.	T.	T.	T.	T.			.11		.15	.14			.12	.37	T.	.12	1.36
Bay City	Saginaw	.10				T.	T.	T.	T.						T.							T.		T.	.45			.40	.45	.30	.15	1.85
Benzonia	Betsie																															
Berlin	Clinton	.13	.02	.02		.03	T.	.02		T.	.40	.02			.09	T.		T.	.02				.14	.21	.33	T.			.32	.07	.10	1.92
Big Rapids	Muskegon	.20	.11			.12		T.			.04	.02	.01		.14	.02		T.	T.			.14	.04	.09	.25	.08		.40	.40		.48	2.54
Bloomingdale	Lake		T.	.30		.20	T.					.20	.20	.10	.10	.30	T.	T.	T.			.50			.30			.20	.15	.20	1.00	3.75
Cadillac	Manistee	.06	.37			.10		.05			T.	.10	.10		.10	.10	.05	.10	.20			.20	.20	.20	.40	.12		.27	.41	.36	.16	3.64
Cassopolis	St. Joseph	.02				.05						T.			T.	T.									.02						.30	
Charlevoix	Lake	.10					1.05	T.																.20				.10		.30	.20	2.95
Charlotte	Kalamazoo	.03	T.			.01	T.					T.			.06		T.	T.				.05	T.	.10	.14			.09	.35	T.	.03	0.86
Cheboygan	Cheboygan		.65			T.	T.					.38					T.	T.				.38	T.					1.10	.65	.12	3.28
Clinton	Raisin		.10			T.	T.				33				T.							.07	T.	.11	.20			.13	.57		T.	1.51
Coldwater	St. Joseph	.02	.25			.03					.31		.06		.05			T.					.05	.08	.15			.21	.58		.06	1.83
Concord	Kalamazoo	.20	T.			T.	T.				.35	T.			T.			T.	T.			T.		.32	.15			.18	.33		T.	1.55
Croton	Muskegon	.12	.14			.90	T.			T.	T.	T.	T.	T.	.13	T.	T.	T.				.13		.05	.28	T.		.30	.24	T.	.20	2.49

TABLE 2.—*Daily precipitation for November, 1910. District No. 4*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Michigan—Lower Peninsula—Continued.																																
Detroit	Detroit	.13	.01			.03	T.	T.		.01	.70	T.	T.		.08	T.	T.	T.	.01			.10		.19	.34			.05	.20	T.	.19	2.04
Durand	Saginaw				.07	T.						T.			.07	T.		T.	T.			.05	T.	.21	.10			T.	.38	T.	T.	0.88
East Tawas	Lake	.20						T.														.10		.12	.25				.45	.05	T.	1.17
Eloise	Rouge		.16	T.		T.	.11				.65	T.	T.		.03	T.		T.	.03			.06	.02	.20	.21	.08		.05	.22	T.	.05	1.87
Flint	Saginaw		.18	.15		.05				.05	.15				.05				.05			.08	.07	.15	.25	.20		.05	.45		.12	2.05
Frankfort	Betsie	.50		.10		.30									.15									.30	.20			.30	.40		.20	2.45
Ganges	Lake	.10		.10		.13	T.		T.					T.	.13	.20						.13		.05	.09			.11	.30	T.	.20	1.09
Gaylord	Cheboygan																															
Gladwin	Saginaw		T.			T.						.01			T.							.25		.05	.15			T.	.25		.40	1.11
Grand Haven	Grand	.19	.03		.06	.10	.02	T.	T.	T.	.02	.05	.06	T.	.06	.03	.01	T.	T.		.06	.17		.07	.20			.41	.04	.05	.28	1.91
Grand Rapids	do	.11	.16	T.		.07	T.		T.		.02	.02	T.	T.	.11	T.	T.	T.	T.		.03	.09		.05	.15			.29	.10	.02	.12	1.34
Grape	Raisin	T.	.14			T.					.62				.06	T.						.12		.13	.19			.08	.35		T.	1.72
Grass Lake	Grand	T.	.17			.08	T.	T.			.29		T.		.08							T.	.20	.94	.20			.22	.38	T.	.30	2.86
Grayling	Au Sable	.20	.20	.10	.15	.40	.10	.10				.40										.05			.60			T.	.60	.28		3.10
Harbor Beach	Lake		.15	.35			.10																	.20	.10	.10			.10	.10	.10	1.10
Harrison	Saginaw	.03	.78																			.20		.20				**	.40	T.	T.	1.61
Harrisville	Lake	.15	.03			T.		T.	.15		.20	.05	.15					T.	T.			.05		.04	.12	.17	.10		.60			1.81
Hart	Pentwater		.62				.10	.05		.06	.05										.10				.60					T.	.40	1.98
Hayes	Pigeon																												.60	.10	.10	2.57
Highland	Huron		.37	.24							.15	.21				.10							.20	.18	.35							
Hillsdale	St. Joseph	.01	T.	T.		T.	T.				.10	.05			T.	T.		T.				T.	T.		T.			.10	.15	T.	.30	0.76
Holland	Lake	.15	.30	.12		.09						T.	.12		T.	.10	T.					.12	.05		.15			.20	.13	.05	.25	1.93
Howell	Saginaw			.05		.02										T.		T.	T.					.90	.80				.50	T.	T.	2.27
Ivan	Manistee	.27		.05		.10	.05	.05	T.		.22	.36	.15	.08	.05	.02	.05		T.	.12		.08	.14	.21	.30	.05		.28	.67	.18	.18	3.09
Jackson	Grand	.04	.16	.08		T.					.19				.10				T.			T.	.05	T.	.14			.22	.60	T.	.10	1.68
Jeddo	St. Clair	.10	.06	.15	T.	T.	T.	.05			.42	T.			.10	.08	.04	.10				.05	.02	.39	.15	.16				.05	.40	2.34
Kalamazoo	Kalamazoo	.10	.12			.25		.40	.43						.10	.08	.04	.10	.02			.05		.14	.15			.14	.19			2.24
Lansing (Agr. Col.)	Grand	.14	.01			.03				.01	.07	.01			.08							.05		.16	.16			.12	.31	.02	.19	1.37
Lansing	do	.15	.04			.08	T.			.01	.07	T.			.06	T.		.02	.02			.11		.13	.16	.02		.10	.35		.15	1.47
Lapeer	Saginaw		T.								.02				T.										.18	.15		.30		.20		
Ludington	Pere Marquette	.40	.45	.03											.05							.12			.36			**	.72		.20	2.35
Luther	Manistee	.11	.20			.11	.04				.11	.11	.02	T.	.11	.05		.04	.02			.07	.12	.17	.26	.14		.52	.36	.02	.20	2.78
Mackinaw	Lake	T.						.10			T.	T.					.01	.05	.10	.10		.10	.40	.10				.30	.40	.10	.40	1.50
Mancelona	do	.10	.50			.01	.70	.40				.20									.20								.80	T.	.80	4.37
Manistee	Manistee		.40	1.28		.36									T.	T.	T.		T.			T.	T.	T.	1.10	.05	T.	.95	T.	T.	.20	4.34
Midland	Saginaw																															
Montague	White																															
Morenci	Maumee		.19	.23							.56				.09								.04	.05	.19			.19	.55			2.09
Mount Clemens	Clinton	.10	.09			.03		T.	T.	.40	.50	T.	T.		.05	T.			.02			.03	T.	.20	.25	.15		T.	.40	T.	.04	2.20
Mount Pleasant	Saginaw			.20											.10														.20		.20	
Muskegon	Muskegon	.20	.10			T.	T.					T.	T.		T.		T.				.10	T.	T.	.20	.30			.40	T.	T.	.20	1.50
Old Mission	Lake	.40	.54			.32	.08	.16				.22	.07		.11	.04	.06		.07			.27	.22	.28				.09	.75	.33	.30	4.31
Olivet	Kalamazoo	.03	.02			.02	T.					.03			.05		.01	T.	T.			.05	.11	.10	.15			.12	.53		.04	1.26
Omer	Lake																		T.			.45			.15					1.40		3.75
Onaway	Cheboygan	.90					.10	.15				.60																				
Ovid	Grand										.07				.10	.04							.05	.34	.21	.07		.08	.30		.20	1.76
Owasso	Saginaw		.23				.07					.02	.04	.02		.01	.02	.02	.04										.30	.20		0.88
Petoskey	Lake	.03				.15	.03			.75	T.											T.	T.		1.00			.01	T.	T.	T.	1.76
Plymouth	Rouge					T.													T.			.05		.26	.18	.20		.02	.24	T.	.05	1.65
Pontiac	Clinton	.06		.18		.06		T.		T.	.27	T.	T.		.08	T.																
Port Austin	Lake																					.05	.01	.24	.28			.05	.15	.01	.27	1.80
Port Huron	St. Clair	.12		.02	T.	T.	T.	.06	T.	.02	.44	T.			.07							T.			.15			.30	.20	.05	.20	1.35
Reed City	Muskegon	.30										T.	.05		.05	T.		.05														
Roscommon	Au Sable														.35	T.		T.	T.			.15	.05	.12				.15	.50	.05	.45	1.97
Saginaw	Saginaw	T.		T.		.15									.19	.01	T.	T.	T.			.10	.02	.16	.29	.02		.01	.57	.04	.27	1.13
Saginaw W. S.	do	.14	T.	.03		.02	T.	.02		.01	.03	T.						T.				.20	T.	.34	.05	.03		.02	.35	T.	.03	2.31
St. James	Lake	.30	.29			.56	T.	.08																T.	.50		T.	.12	.25		.15	2.32
St. Joseph	St. Joseph	.40	.20									T.	T.		.70							.02	.01		.03				.10	.10	.20	0.80
Sandusky	Lake		.24	.04				T.		.04		T.			.02							.03	.10	T.	.23			.22	.28	T.	.10	1.58
Saranac	Grand		.25	T.		.25				.02					.10				T.													
South Haven	Lake					.40									1.00																	
Stanton	Grand																															
Thornville	Saginaw		.30		.18			.08			.40	.10	T.		.20	.10						.24	.18	.24	.12			.08	.50	.24	.20	3.22
Traverse City	Lake																															
Vassar	Saginaw		T.	.40				.05			T.				.22							.20	.02	.30	.18	.38		T.	.40	.05	.30	2.50
Wasepi	St. Joseph	.17	.02			.07					.07		.12		.16							.16	.03	.15	.20			.07	.50		.10	1.88
Webberville	Grand	.19	.12			T.	T.				.22	T.			.05							.10	.05	.49	.31			.16	.40	T.	.20	2.29
West Branch	Lake																															
Woodlawn	Au Sable	.30	.43			.15	.20	.08	.08		.25	.30	.20	T.		.10	T.	T.	T.			.40		.30	.15	.10		T.	1.00	.30	.30	4.64
Ypsilanti	Lake	.12	.10	T.		.02				.07	.00	.01			.12	T.						.13	.08	.10	.38			.08	.40	.02	.03	2.32
Ohio.																																
Akron	Lake		.18			T.	.05	T.			.50	T.	.25	T.		.12	T.	T.	T.				.05		.12	.15	T.	T.	.07	.05	.04	1.58
Benton Ridge	Maumee		.23	.09		.20	T.				.56	T.	.02		.02							T.	T.	.43	.11			.48	.37	T.	.20	2.77
Bowling Green	Lake	T.	.25			T.	T.				.60	T.			.20	T.							.10	.22				.27	.27	.05	.10	2.06
Bucyrus	Sandusky		.30			T.		T.			.90		T.	T.		T.							T.			.55		.10	T.	T.	.10	1.95
Cleveland (1)	Lake	.10	.02	.08		.04	.42	.02	T.	T.	.60	.42	.02		.04	T.		T.	.01			.09	.08	.14	.50			.01	.19	.12	.18	3.08
Cleveland (2)	do	.25		.17		.05	.19				.80	.49			.20		T.		T.			.04	.11	.21	.45			T.	.15	.06	.20	3.41
Conneaut	do		.24			T.	.66		.15		.62	.16		.18	.50								.09	.10		.35			.40	T.	.40	3.85
Defiance	Maumee	T.	.01	T.	.08	T.				.58	T.	T.	.01		T.	T.		T.	T.			T.		.06	.17			.07	.49	T.	.04	1.51
Findlay	do		.19	.10		.01					.83	T.				.02	T.								.18	.18		.12	.68	T.	T.	2.31
Fremont	Sandusky	.18	T.	.11			T.				.74				.09	T.						T.		.23	.30			.26	.20		.11	2.22
Hedges	Maumee	.04	.21			.19					.07	.10	T.		.08				T.					.06	.11	.01		.30	.51	T.	.30	1.98
Hillhouse	Lake		.21	T.		T.	1.25	.31	.10		.70	.15	.06		.20	T.	T.	T.	T.			T.	.34	.15	.05	.50			.25	.13	.20	4.60
Hiram	do	T.	.31			T.	.02	.14	T.		.78	.13	.40	T.	.15	.24	.02		T.			T.	.21	.15	.16				.46	.05	3.22
Hudson	do		.18			.05		.05			.93	.14	.18	.02	.06	.26	T.	T.	T.	.04		.04	.24	.22	.20	.02		.12	.20	.40	3.35
Lima	Maumee		.44	T.		.08					.63	T.	T.		T.	T.			T.					.21	.10			.60	.40	.01		2.47
Medina	Lake						T.				.80	T.	.10		.12	T.								.14	.26			.08	.23	.16	T.	1.89
Montpelier	Maumee	.30	.10								.57											.05			.35			.55	.10			2.02
Napoleon	do	T.	.30	.15		.11	T.				.60	T.			.05							.03		.08	.15	.07		.30	.40		.10	2.43
New Bremen	do	T.		T.		.36					.40				T.	T.								.07	.06			.68	.62	.01	T.	2.20
North Royalton	Lake		.24			.07					.88	.20	.30		.40	.10							.20	.17	.17	.26				.21	.20	.20	3.60
Norwalk	do		.28	.10							.30	.15														.45			.40			1.68
Oberlin	do		.36			T.	T.	T.				.03	T.	.17	T.									.28	.20			.40	.15	.14	.15	1.85
Ottawa	Maumee		.20			.27					.24	T.			T.	T.			T.					.08	.14			.44	.43	T.	.10	1.90
Sandusky	Lake	.12		.09		T.	T.				.41	.02	T.		.06	T.	T.	T.	T.			.01	.01	.08	.39			.16	.09	.01	.10	1.55
Tiffin	Sandusky	T.	.28	T.		.06	T.	T.			.62	T.	T.	T.	.06	.04	T.	T.	T.			T.	T.	.12	.18	.02		.31	.19	.04	.10	2.02
Toledo (1)	Maumee	.22	.08	.05		.02	.01				.75	.01			.02	T.	T.	T.	T.			.07	.01	.07	.27			.15	.35	.01	.13	2.22
Toledo (2)	do	.15	.05	.14		.03	T.	T.			.64	.01			.03	T.		T.				.03	.04	.06	.20			.12	.21	.01	.05	1.77
Upper Sandusky	Sandusky																															
Vickery	Lake		.10	T.		.01	.04				.57	.01			.11								.05	.14	.31			.25	.17		.06	1.82
Wauseon	Maumee	.31	.04	.13		.01	.01				.60	.05	.01		.08	.02	T.	T.	T.			.03	.03	.11	.25			.26	.54	T.	.13	2.61
Wellington	Lake					.02	T.				.70	T.	.06		.14	.02	T.	T.	T.			T.	T.	.25	.22			.32	.10	.08	.15	2.06
Willoughby	do						.34	*	.31	.02	.46	.24	.06			.38		.52				.05		.34	.54			.24	.03	.10		3.63

TABLE 2.—*Daily precipitation for November, 1910. District No. 4*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Pennsylvania.																															
Erie	Lake	.01	.37	T.	.....	.09	.49	.12	.20	T.	.71	.02	.06	.09	.53	T.	T.	.....	.02	T.	.....	.02	.03	.15	.14	.12	T.	T.	.14	.03	.11	3.45
New York.																															
Adams Center	Lake	.....	.18	T.	.15	.19	.27	.40	.02	.20	.39	.40	.30	.10	.20	.05	.05	T.	.10	.10	.....	.....	.....	.....	.04	.....	.15	.....	.....	.05	.10	3.44
Angelica	Genesee	.....	.09	.....	.02	.....	.....	.06	.11	.....	.23	.13	.28	.19	.07	.05	.08	T.	T.	.11	T.	T.	T.	T.	.02	.28	T.	.....	.50	.10	.03	2.35
Appleton	Lake	.....	.18	.....	.....	T.	T.	.10	.16	.45	.22	T.	T.	T.	T.	T.	.....	.....	T.	.....	.....	T.	T.	T.	.15	.05	.....	.....	.31	.30	.10	2.02
Auburn	Oswego	.....	.22	.06	.90	.14	.....	.06	.05	T.	.40	T.	.19	.28	.....	.38	.16	.....	T.	T.	.....	T.	T.	.11	.....	T.	.10	.....	.24	.45	.22	3.96
Avon	Genesee	.....	.....	.....	T.	.....	T.	T.	.10	T.	.65	T.	.17	T.	T.	T.	.05	.....	T.	.10	.....	.....	.....	.....	T.	.10	T.	.....	.35	.48	.30	2.30
Blue Mountain Lake	Raquette	.....	.....	.....	.15	.20	.10	.13	.07	T.	.05	.12	.09	.13	.15	.47	.21	T.	T.	T.	.....	T.	T.	T.	T.	T.	T.	.....	T.	.20	.40	2.47
Brockport	Lake	.....	.07	.....	.02	.....	.....	.....	.17	.02	.70	.....	.16	.03	.03	.04	.10	.....	.....	.01	.....	.....	.01	.....	.30	.06	.08	.....	.21	.60	.07	2.68
Buffalo	do	T.	.30	.....	T.	.02	.05	.16	.27	.69	T.	.07	.04	.01	.07	T.	.....	T.	T.	.....	.....	.18	.01	.27	.11	.03	.02	.....	.47	T.	.12	2.89
Canton	St. Lawrence	.....	.09	.03	.01	.16	.10	.18	T.	.....	.54	.21	.06	.38	.05	.15	.....	.....	.02	.03	.....	.02	.04	.....	.09	.....	T.	.....	.....	.61	.14	2.91
Cape Vincent	do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Carvers Falls	Lake	.....	.....	.80	.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.65	.15	1.85
Chazy	do	.....	.....	.07	.08	.52	.08	T.	.....	.....	.40	.....	T.	.....	.03	.....	.....	.....	.....	.....	.....	.....	T.	.....	.....	.....	.....	.....	.....	.10	.30	1.58
Dannemora	do	.....	.01	.06	.02	.19	.....	.02	T.	T.	.37	.04	.01	.03	.01	T.	T.	T.	T.	T.	.....	.....	.07	.....	.10	T.	.....	.....	.....	.27	.30	1.59
Elba	do	.....	.....	.....	.....	.....	T.	.....	.20	T.	.90	.....	.30	.30	.....	.10	.20	.....	.....	.20	.....	.....	T.	.....	T.	1.40	.....	.20	T.	.10	3.90
Fayetteville	Oswego	.....	.30	T.	.81	.36	T.	.08	T.	.11	.21	.....	.32	.42	.10	.04	.02	.04	T.	T.	.....	.02	.....	.18	.08	.03	T.	.....	.04	T.	.....	3.16
Gabriels	Lake	.....	.10	.16	.09	.02	.03	.16	T.	.....	.15	.06	.04	.17	.11	.04	.09	.03	T.	.05	.03	.....	.11	.....	.11	.....	.....	.....	.....	.60	.26	2.41
Harkness	do	.....	.07	.12	.06	.40	.....	T.	.....	.....	.05	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.37	.29	1.43
Hemlock Lake	Genesee	.....	.....	.....	.24	.....	.....	.....	.....	T.	T.	.59	T.	.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.10	T.	T.	T.	.15	.65	1.94
Hunt	do	.....	.18	.....	.....	.....	.....	.....	.30	.....	.34	.....	.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.72	.....	.....	.47	.....	.....	.....	2.21
Ithaca	Oswego	.....	.28	.28	.37	.12	T.	T.	.04	.21	.09	.01	.11	.04	.04	.02	T.	T.	T.	.06	.....	T.	T.	.05	.....	.32	.02	.....	.23	.50	.06	2.85
Keene Valley	Au Sable	.....	.05	.14	.53	.32	.....	.....	.....	.....	.22	.....	T.	.18	.03	.03	.02	T.	T.	T.	.....	.....	.16	T.	.03	.....	.....	.....	.....	.54	.20	2.45
King Ferry	Oswego	.....	.18	.....	.15	.02	.....	.....	.17	.06	.24	.....	.04	.04	.....	.07	.03	.....	.....	.04	.....	.....	.01	.....	.....	.24	.06	.....	.18	.42	.10	2.05
Lake George	Lake	.....	.....	.51	.21	.36	.....	.....	.....	.....	.08	.06	.12	T.	.....	.....	.....	.....	T.	.....	.....	.08	T.	.....	.....	.....	.....	.....	.72	.12	.....	2.26
Lake Placid Club	Au Sable, W. Br.	.....	.08	.31	.41	.80	.23	.35	T.	.....	.32	.10	.15	.56	.15	.08	T.	.10	T.	.25	.15	.....	.10	.....	.12	.05	.....	.....	.....	.43	.15	4.91
Le Roy	Genesee	.....	.08	.....	.03	.....	.02	.....	.12	.10	.62	T.	.20	.46	.01	.04	.17	.....	T.	.10	.....	T.	.....	.06	*	.22	.04	.....	.48	.22	.07	3.10
Lockport	Lake	.....	.18	.....	.....	.....	T.	.....	.20	.03	.73	T.	.15	.03	T.	T.	.19	.....	.....	.02	.....	.....	.....	.....	.....	25	.....	.....	.19	.39	T.	2.36
Lowville	do	.....	.20	.....	.47	.....	.....	.....	.....	.....	.40	.....	.16	.12	.....	.05	.....	.....	.....	.....	.....	.....	.10	.05	.10	.....	.05	.....	.....	.23	.....	1.93
Lyndonville	do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Morris	St. Lawrence	.....	.01	.03	.05	.18	.22	.04	.....	.....	.40	.....	.....	.30	.10	T.	.01	.....	.....	T.	.....	.....	.01	.....	.04	.....	.....	.....	.....	.45	.40	2.24
Nehasane	Lake	.....	.18	.13	.32	.15	.07	.15	T.	.02	.22	.12	.13	.35	.10	.07	.09	T.	.05	.09	.02	T.	.11	.....	.24	T.	.10	.....	.....	.31	.22	3.24
North Lake	do	.....	.74	.....	.14	.....	.....	.20	.....	.....	.75	.....	.....	.....	.....	.20	.....	.....	.....	.20	.....	.....	.20	.....	.20	.....	.....	.....	.....	.20	.20	2.83
Ogdensburg	St. Lawrence	.....	.06	.....	T.	.25	.08	.04	.....	.....	.47	.12	.15	.08	.04	.05	.....	.....	.....	.05	.....	.....	.05	.....	.11	.....	.....	.....	.....	.25	.23	1.98
Old Forge	Lake	.....	.37	.....	.18	.38	.07	.13	.....	.10	.27	.10	.12	.45	.10	.16	.07	.....	.....	.18	.....	.04	.10	T.	.14	.01	.16	.....	.....	.35	.18	3.66
Oswego	do	.....	.24	T.	.29	.03	.13	.27	.08	.69	.40	.61	T.	.02	.17	.20	.....	T.	.32	.20	.....	T.	.02	.11	.11	.07	T.	.....	.01	.20	.33	4.50
Otto	do	.....	.06	.....	.....	T.	.....	.36	.06	.09	.16	.03	.20	.16	.....	.32	.15	.....	T.	.....	.....	.....	T.	.....	.....	.....	.....	.....	.15	T.	.04	1.78
Palermo	do	.....	.40	.06	.10	.03	.50	.....	.36	.16	.10	T.	.28	.02	.15	.50	.13	.05	.06	.58	.....	.....	.....	T.	.....	.06	.09	.01	.....	.20	.30	4.14
Perry City	do	.....	.17	.....	.68	.05	T.	.....	.20	.05	.22	.02	.27	.13	.02	T.	.04	.....	.....	.04	.....	.....	.03	.....	.25	.06	.....	.07	.55	.10	2.95
Philadelphia	St. Lawrence	.....	.18	.....	.07	.10	.18	.51	.....	.....	.43	.71	.29	.04	T.	T.	.....	T.	.11	.....	.....	.02	.....	.03	.31	.....	.....	.....	.15	.16	.....	3.29
Plattsburg	Lake	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Potsdam	St. Lawrence	.....	.....	.07	.02	.10	.15	.01	.....	.....	.....	.67	.05	*	.32	.....	.08	.....	.....	.....	.....	.....	.06	.....	.....	.....	.....	.....	.....	.09	.56	2.18
Raquette Lake	Raquette	.....	.16	.46	.31	T.	T.	T.	.12	.....	.19	.23	.08	.19	.08	.06	T.	.....	.....	.06	.....	.....	.14	.....	.11	.....	.03	.....	.....	.27	.14	2.63
Rochester	Genesee	.....	.05	.02	.02	.....	T.	T.	.10	.22	.51	.10	.10	.15	.01	.26	.06	.....	T.	T.	.....	T.	T.	.03	.12	.16	.03	.....	.36	.54	.23	3.07
Romulus	Oswego	.....	.14	.....	.20	.....	.....	.....	.10	T.	T.	T.	.20	.02	.....	T.	T.	.....	T.	T.	.....	.....	.....	.....	.....	.08	T.	.....	T.	.60	.04	1.38
Shortsville	do	.....	T.	.03	.07	.06	.....	.....	.08	.06	.35	.....	.11	.....	.....	.....	.....	.....	T.	.....	.....	.....	.....	.....	.....	.58	.07	.....	.08	.67	T.	2.16
Skaneateles	do	.....	.....	.31	.73	.12	.14	.02	.05	.10	.17	T.	.20	.35	.10	.23	.30	.07	.05	.03	T.	.05	.06	T.	.04	.28	.12	T.	.....	.23	.34	4.09
Syracuse	do	.....	.20	.20	.28	.13	.06	.10	.02	.31	T.	T.	.06	.19	.04	.05	.03	.05	.01	.01	.....	T.	T.	.05	.05	.07	.02	.....	.06	.14	.06	2.19
Ticonderoga	Lake	.....	T.	.30	.....	.50	.....	T.	.....	.....	.....	.....	T.	T.	.....	.....	.....	.....	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.49	.....	1.29
Trudeau	do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tupper Lake	Raquette	.....	.10	.10	.30	.02	T.	.08	.....	.....	.40	1.20	.04	.19	T.	T.	.09	.07	.....	.04	.....	.....	.06	.....	.19	.....	.....	.....	.....	.50	.20	3.58
Volusia	Lake	.....	.17	.....	.....	T.	.58	.44	.19	.....	.68	.23	.26	T.	.25	.13	.08	.....	.03	.22	.....	.....	.22	.....	.04	.25	.....	.....	.11	.35	.66	4.89
Wanakena	Oswegatchie	.....	.15	.10	.10	.10	.05	.15	.....	.....	.20	.18	.04	.25	.....	.....	.....	.10	.14	.....	.....	.....	.14	.....	.28	.....	.....	.....	.....	.23	.12	2.33
Watertown	Lake	.....	.34	.02	.12	.18	.20	.45	.22	.13	.60	.50	.51	.06	T.	.09	.06	.....	.02	.06	.....	.....	.06	.....	.12	.....	.16	.....	.....	.10	.12	4.12
Wedgewood	Oswego	.....	.12	T.	.52	T.	T.	T.	.16	.....	.20	.08	.13	.09	.02	.06	.01	.....	.....	.01	.....	.....	.....	.....	.03	.40	.04	.....	.22	.41	.03	2.56
Westfield	Lake	.....	T.	.....	.....	.14	.37	.17	.....	.....	.....	.22	T.	T.	.14	T.	T.	.....	.16	.18	.....	T.	.09	.18	.21	.39	T.	.....	.34	.29	.43	3.31
Youngstown	do	.....	.....	.....	.....	.....	.....	.....	.15	.....	.10	.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.10	.....	.....	.20	.25	.08	1.58
Vermont.																															
Burlington	Lake	.....	.21	.24	.09	.38	.06	.03	.....	.....	.01	.07	T.	.20	.12	.02	T.	T.	.....	.04	.....	T.	.04	.....	.01	.....	.....	.....	.....	.57	.34	2.43
Cornwall	do	.....	.20	.38	.08	.51	.05	.02	.....	.....	.05	.....	.01	.05	.20	.....	.....	.....	.....	.....	.....	.....	.09	.....	.....	T.	.....	.....	.....	1.00	.....	2.59
Enosburg Falls	do	.....	T.	.66	.10	.35	.13	.06	.....	.....	.07	.03	.02	.26	.14	.....	.07	.....	.....	.....	.....	.....	.....	.....	.20	.01	.....	.....	.....	.23	.30	2.63
Northfield	do	.....	.38	.09	.04	.10	.02	T.	T.	.....	.07	T.	T.	.04	T.	.01	T.	T.	.....	T.	.....	.....	.07	T.	.02	T.	T.	.....	.....	.58	.17	2.19
Rutland	do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wells	do	.....	.....	.82	.26	.22	.10	T.	.....	.....	.05	.....	.....	.27	.04	T.	T.	.....	.....	.....	.....	.....	T.	.....	.15	T.	.....	.....	.....	.86	.29	3.06

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 4, Lake Region.*

Date.	Duluth, Minn.		Wisconsin.						Chicago, Ill.		Fort Wayne, Ind.		Michigan, Upper Peninsula.										Michigan, Lower Peninsula.					
			Florence.		Green Bay.		Milwaukee.						Escanaba.		Ewen.		Houghton.		Marquette.		Sault Ste. Marie.		Alpena.		Battle Creek.		Cadillac.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	39	29	46	30	45	29	55	32	59	34	60	44	49	31	37	35	43	33	46	33	45	31	51	37	56	42	58	41
2	30	23	30	25	32	25	36	29	42	31	53	32	36	27	35	21	33	28	33	27	31	27	37	31	53	32	46	29
3	35	22	36	20	37	22	40	28	42	31	43	28	38	24	36	15	36	24	38	26	31	22	40	28	40	31	44	24
4	35	23	36	25	38	24	46	33	48	35	48	22	42	33	35	27	38	33	39	27	33	19	38	30	44	21	45	20
5	24	16	34	24	33	24	36	24	42	28	38	27	37	26	34	18	36	24	36	24	36	30	39	32	38	27	38	31
6	28	14	24	20	27	19	29	20	36	22	35	24	31	23	38	20	28	24	28	23	33	26	37	27	33	26	33	24
7	30	17	33	19	40	24	49	26	58	29	42	21	35	23	30	19	30	25	33	25	30	23	36	27	39	23	35	25
8	33	20	36	20	39	27	46	29	46	31	49	28	38	20	35	19	35	26	35	23	34	26	40	27	44	28	49	27
9	34	23	35	26	48	35	58	38	67	46	67	32	47	34	35	23	38	31	40	33	40	31	46	32	52	35	52	31
10	26	18	35	20	38	26	38	27	46	29	63	37	39	26	34	23	36	25	35	24	37	26	42	28	58	33	41	26
11	32	19	32	20	36	23	33	23	35	25	37	29	35	24	31	23	34	28	35	25	33	25	33	27	34	25	32	25
12	31	19	32	27	36	26	35	25	40	26	38	29	36	31	31	28	34	31	35	31	35	30	35	31	40	30	34	28
13	30	24	37	26	39	28	40	28	39	30	39	34	36	30	34	27	34	29	33	28	34	26	34	30	40	30	35	30
14	27	20	34	22	34	28	35	32	38	33	39	27	35	28	33	27	32	30	33	29	33	20	34	30	36	26	31	28
15	23	18	32	29	35	28	34	29	36	30	37	32	36	29	31	25	32	29	33	28	34	28	37	30	37	28	35	21
16	20	16	30	23	30	26	29	23	31	25	39	30	33	29	32	24	32	27	32	28	33	26	36	31	35	28	32	28
17	22	14	29	19	26	21	25	22	28	25	32	25	31	27	25	17	29	24	31	24	36	27	37	31	34	28	30	25
18	26	19	29	19	27	21	26	22	33	24	39	25	31	25	24	18	30	24	28	24	33	20	36	27	30	24	30	24
19	25	19	34	19	29	20	36	24	40	25	43	28	33	24	30	14	29	19	37	22	33	20	35	27	38	22	36	25
20	30	24	36	22	43	24	48	27	47	30	47	16	42	26	26	18	38	27	40	25	38	32	40	27	42	20	38	28
21	24	19	36	26	33	26	35	27	37	29	38	30	34	30	32	19	34	32	34	30	35	33	35	33	36	29	35	29
22	27	19	32	19	37	21	43	24	42	28	44	24	39	29	30	17	34	28	35	27	35	31	36	33	39	24	34	28
23	35	27	33	26	38	28	43	35	50	39	52	31	43	31	34	27	37	30	36	31	38	32	40	33	46	31	34	30
24	42	21	38	20	39	28	50	36	53	39	48	32	37	28	43	17	43	24	43	28	39	36	44	34	39	29	36	28
25	29	19	34	24	33	25	38	25	49	35	50	32	33	26	35	20	31	29	33	28	37	26	35	32	43	33	34	26
26	33	24	33	20	38	26	40	27	43	35	44	23	37	27	33	24	34	30	34	29	34	26	36	32	39	22	31	26
27	32	23	33	29	37	32	38	34	41	38	48	32	35	32	32	23	31	33	34	32	31	26	37	33	35	30	30	24
28	24	11	32	22	32	25	34	25	40	28	39	3	33	26	30	23	34	25	32	25	32	26	37	31	35	30	32	29
29	21	8	23	20	28	23	27	21	30	23	36	29	26	23	24	20	25	22	26	23	31	22	32	26	34	27	29	25
30	15	6	23	18	28	21	23	19	23	20	29	23	30	23	24	17	25	22	28	23	30	22	34	26	28	25	30	22
Mns.	28.7	19.1	32.9	22.6	35.2	25.2	38.2	27.1	42.0	30.1	43.9	28.6	36.1	27.2	32.1	21.7	33.6	27.2	34.5	26.8	34.5	26.5	37.6	30.1	39.9	28.0	36.3	26.9

Date.	Michigan, Lower Peninsula.						Ohio.								Erie, Pa.		New York.								Vermont.			
	Detroit.		Muskegon.		Saginaw W.S.		Cleveland.		Lima.		Sandusky.		Toledo.				Buffalo.		Canton.		Rochester.		Syracuse.		Burlington.		Northfield.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	60	44	56	39	58	38	62	44	52	45	63	45	61	44	60	44	61	48	59	39	64	37	59	42	54	32	53	22
2	44	35	45	34	57	33	50	37	54	37	46	39	49	34	59	40	57	36	54	35	54	38	52	38	55	37	52	38
3	44	33	40	31	41	32	42	33	42	31	43	37	43	33	40	37	39	32	35	28	39	35	39	29	37	32	38	32
4	45	32	44	29	43	25	42	38	40	27	42	36	45	30	41	34	38	31	40	28	41	34	40	29	41	33	41	34
5	38	30	40	33	37	30	40	36	41	28	39	32	41	31	41	35	41	29	40	33	41	35	40	34	44	40	48	38
6	34	28	36	33	56	27	36	28	37	23	34	27	36	30	39	29	38	30	39	32	39	33	40	32	45	34	45	33
7	40	27	42	27	36	22	43	28	43	23	46	28	42	29	35	29	38	29	34	27	38	28	38	28	36	32	38	23
8	42	31	43	35	43	23	42	34	44	35	42	35	48	33	40	32	39	31	34	23	37	31	38	31	40	31	37	26
9	61	37	54	36	58	34	63	36	61	35	65	36	64	37	60	36	53	37	41	23	42	34	38	33	40	27	35	21
10	56	34	43	37	49	32	60	32	57	37	59	36	60	35	58	37	54	36	48	28	52	36	56	38	46	27	42	20
11	34	29	37	30	36	26	37	29	39	28	36	31	37	30	37	31	36	32	38	28	38	30	39	32	43	26	42	24
12	38	31	37	34	40	30	40	36	37	29	38	36	41	33	39	32	34	29	31	27	35	29	34	27	36	24	35	22
13	39	31	38	33	43	30	39	35	38	33	38	34	41	35	39	34	36	32	34	29	35	31	33	30	34	28	36	28
14	35	31	38	32	37	29	38	33	36	30	36	32	39	32	38	32	38	30	35	28	36	31	36	30	34	28	34	27
15	38	30	37	31	38	29	38	34	35	30	37	33	40	32	37	34	36	30	33	28	36	31	34	29	38	27	35	26
16	36	31	36	31	37	32	38	34	34	30	36	33	40	32	38	34	36	30	32	27	34	31	34	30	33	30	31	28
17	31	29	32	30	35	29	34	28	35	26	33	29	35	30	38	31	38	34	30	21	38	32	35	30	35	29	33	28
18	30	28	32	29	33	27	34	28	36	25	33	28	35	29	35	28	34	30	30	20	34	32	36	32	32	23	37	22
19	37	29	38	30	37	27	35	31	35	24	35	29	38	27	36	33	33	29	25	22	33	28	32	24	28	23	30	23
20	39	30	44	39	41	21	39	25	43	20	42	25	41	25	38	31	33	26	30	18	33	27	32	20	32	16	30	14
21	39	30	42	31	39	30	40	29	39	35	40	33	42	31	41	30	42	25	35	14	41	26	39	19	36	14	34	11
22	38	28	37	31	41	28	36	32	37	23	38	26	41	29	37	32	42	33	32	29	39	35	39	34	33	30	34	27
23	42	34	42	31	41	28	46	32	47	31	48	32	50	32	45	33	46	36	39	28	44	32	43	34	39	27	38	26
24	39	32	44	30	40	30	43	35	47	31	42	34	43	34	45	36	44	38	41	35	44	38	43	36	41	36	40	33
25	45	33	42	33	41	32	42	36	48	36	45	36	48	34	41	36	41	34	37	33	41	31	39	31	40	34	40	31
26	40	33	37	30	35	30	38	35	39	25	37	33	40	32	37	33	36	32	35	31	37	31	35	30	36	32	33	29
27	37	34	35	33	35	28	39	32	36	32	36	32	36	32	40	29	34	31	36	23	36	30	34	25	35	28	33	27
28	39	33	35	32	36	32	39	35	37	33	37	34	37	32	41	36	38	30	37	25	38	29	39	26	33	27	30	28
29	33	27	34	29	34	27	36	29	36	28	35	30	36	30	37	32	36	31	33	31	34	31	35	32	33	29	33	28
30	31	26	32	29	31	25	34	28	38	23	31	28	33	28	35	29	34	30	33	29	34	30	33	30	35	29	34	28
Mns.	40.1	31.3	39.7	32.1	40.9	28.9	41.5	32.7	41.4	29.8	41.1	32.6	42.7	31.8	41.6	33.3	40.2	32.0	36.7	27.4	39.6	31.9	38.8	30.5	38.1	28.8	37.4	26.6

Climatological Data for November, 1910.
DISTRICT No. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

GENERAL SUMMARY.

There was a marked contrast between the weather in November, 1909, and November, 1910. Last year both the temperature and precipitation were above the normal and the snowfall was much more than the average, especially north of central Iowa. The heavy rains caused high stages in all streams and in Iowa many of the streams were out of their banks, flooding the bottom lands, which was unprecedented for that season of the year. This year, both the temperature and precipitation were below the normal, the precipitation being especially light, and the weather was on the whole, very pleasant and favorable for all outdoor operations. Although there was an excess of cloudiness, there was less than the usual number of stormy days.

TEMPERATURE.

The temperature was below the normal at every station in the district, except Forman and Pembina, N. Dak. The deficiency was due, however, to uniformly low maximum, rather than to unusually low minimum temperatures. In fact the minimum temperatures were above the normal over the larger part of the district, and while there were several days during the month on which moderately low temperatures prevailed, the first general cold wave of the season did not occur until the last day of the month. The 1st, 6th to the 9th, and the 22d to the 25th were the warmest days of the month, and the 29th and 30th, the coldest.

The monthly mean temperature for the district, as shown by the records of 291 stations, was 30.2°, which is 3.7° below the normal. The highest monthly mean was 45.4° at Cobden, Ill., and the lowest monthly mean, 18° at Bottineau, N. Dak. The highest temperature reported was 78° at Cobden, Ill., on the 27th, and the lowest −23° at Cando, N. Dak., on the 29th.

PRECIPITATION.

The precipitation was below the normal at all stations in the district, except at 7 in North Dakota, 5 in Wisconsin, and 3 in Illinois. The average departure for the various States ranged from −0.01 inch in North Dakota to −1.74 inches in Missouri. The greatest precipitation occurred in Indiana and Wisconsin, and the least in northeastern South Dakota and Iowa, 5 stations in the latter State reporting only a trace for the entire month. While the precipitation was fairly well distributed throughout the month, the daily amounts were generally small and not sufficient to be of material value in relieving the droughty conditions or increasing the water supply which is abnormally low. The amount of snowfall was much below the average for November. Over the southern portion of the district there was no snow, and many stations in the central portion reported only a trace. Over the northern States the greater portion of the precipitation was in the form of snow; the average amounts for the various States ranged from 3.9 inches in Minnesota to 5 inches in North Dakota and 5.4 inches in Wisconsin.

The average precipitation for the district, as shown by the records of 302 stations, was 0.70 inch, which is 0.95 inch below the normal. The greatest amount, 4.65 inches, occurred at Windsor, Ill., and the least, a trace, at Carroll, Forest City, Sac City, Stuart, and Whitten, Iowa, and Sublett, Mo. The greatest amount in 24 consecutive hours, 4.30 inches, occurred at Windsor, Ill., on the 27th. The average depth of unmelted snowfall was 2.6 inches; the greatest amount was 18.0 inches at Koepenick, Wis. At 32 stations, mainly over the southern half of the district, no snow fell. At the end of the month there were from 2 to 10 inches of snow remaining on the ground in Minnesota and the ground was covered by a thin coating of snow during the latter half of the month in Wisconsin. The average number of days with measurable precipitation was 4.

SUNSHINE AND CLOUDINESS.

The average number of clear days was 10; partly cloudy, 8; cloudy, 12. The duration of sunshine was considerably below the normal.

WIND.

Northwest winds prevailed, the highest velocity reported being 39 miles per hour from the northwest at St. Paul, Minn., on the 30th.

MISCELLANEOUS.

The dry weather was exceptionally favorable for harvesting corn and the crop was practically all in cribs at the end of the month.

The droughty conditions were, however, very damaging to the water supply. Many of the smaller streams are dry, and railroads and stock feeders in many localities are experiencing considerable trouble in securing sufficient water for their needs. Press dispatches indicate that some of the reservoirs along the line of the Burlington road in Iowa are dry or nearly so, and many trains have been carrying two tenders with which to supply water for the engines; one being entirely inadequate where such great distances have to be covered between water stations. The Iowa Central has also experienced considerable trouble, especially over the southeastern divisions of the road. Engines are barely able to make terminal points for water, as the supply at the usual points along the line has been exhausted.

Thunderstorms were quite general in Illinois on the 27th, but the only damage reported occurred at Aurora, where the main factory building of the boiler works was set on fire by lightning. The fire loss was estimated at $12,000.

RIVERS.

The stages of all rivers in the district remained low and showed but little change during the month. The Red River of the North, at Moorhead, Minn., is lower than it has been for many years. The thickness of ice at the wide places was about 8 inches, but it is still unfrozen at the narrow places. The stage of the Mississippi River and its tributaries in Minnesota, continues extremely low. In Wisconsin the small streams froze over about the 18th and there was floating ice in the larger rivers after that date, and the stages of all streams continued low with very little change during the month.

The rivers in the Dubuque River district changed very little during the month, and continued at low stages. The highest stage at Dubuque was 1 foot on the first 20 days of the month; the lowest was 0.8 foot on the 24th. The Mississippi River at Prairie Du Chien ranged from 0.7 to 0.9 foot. The Wisconsin River at Portage averaged slightly above 2 feet. The Mississippi River at Prairie du Chien froze over on the 30th. At Dubuque there was shore or floating ice after the 20th. The Wisconsin River froze over at Muscoda on the 18th and at Grand Rapids on the 30th.—*J. H. Spencer, Local Forecaster.*

The Mississippi River, south of Davenport, remained low and nearly stationary.

DRAINAGE AND ENGINEERING NOTES.

The field work in connection with the survey of the Des Moines River by the United States Army Engineers, under the supervision of Mr. A. O. Rowse, assistant engineer, was completed on November 27. During the month of November topography was taken on both sides of the river, covering area subject to overflow, from 2 miles below Bentonsport to 2 miles below St. Francisville, a distance of 28 miles. Topography was taken in the vicinity of the river from 2 miles below St. Francisville to the mouth of the river, and a strip of topography about one-half mile wide was taken, leaving the Des Moines on the south side about 2 miles below St. Francisville, and entering the Mississippi about 1½ miles below the mouth of the Des Moines. Soundings and probings of the river bottom and levels to determine water slope were taken from 2 miles below Bentonsport to the mouth of the river, a distance of about 39 miles. About 31 miles of topography were platted.

The board of supervisors of Carroll County, Iowa, at a special meeting recently established drainage district No. 23, and authorized the construction of a drainage ditch, which will be more than 25 miles in length, with several miles of laterals. The ditch will run from the head of what is known as Storm Creek, in Kniest Township, and within a few miles of the Sac County line, and winding in a southeasterly course to a point near Grant and Pleasant Valley township lines, where it empties into the middle fork of the Raccoon River.

TABLE 1.—*Climatological data for November, 1910. District No. 5, upper Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota.																				
Amenia	Cass	954	12	24.2	− 1.2	47•	22	0	30	37•	0.30	− 0.38	0.25	2.5	2	9	7	14	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	14	18.0	− 4.4	56	8	− 14	29	41	0.60	+ 0.08	0.28	14.5	6	5	5	20	nw.	J. A. Kemp.
Cando	Towner	1,488	8	19.4	− 8.1	55	8†	− 23	29	63	0.98	+ 0.43	0.48		3	14	12	4	w.	G. Bennett.
Crosby	Williams		3	22.0		54	8	− 11	30	32	0.92		0.54	11.2	4	10	4	16	nw.	H. C. Kaschau.
Devils Lake	Ramsey	1,482	4	20.7	− 1.9	54	8	− 6	29	35	0.55	− 0.16	0.30	5.3	6	5	9	16	nw.	U. S. Weather Bureau.
Donnybrook	Ward	1,700	10																	C. J. De Vore.
Dunseith	Rolette		12	19.7	− 5.0	53	8	− 15	29	45	0.50	+ 0.24	0.20	5.0	3	14	10	6	w.	L. H. Trowbridge.
Edmore	Ramsey	1,524	4	19.9		58	8	− 12	29	38	0.05		0.05	T.	1	16	11	3	w.	H. R. Aslakson.
Forman	Sargent	1,249	15	29.0	+ 2.8	56	6	5	11	46	0.20	− 0.32	0.20	2.0	1	16	3	11	nw.	A. Maltby.
Grafton	Walsh	827	12																	H. La Moure.
Granville	McHenry	1,504	3	21.4		61	8	− 12	29†	36	0.52		0.30	7.0	4	5	13	12	nw.	W. A. Christiansen.
Hannah	Cavalier	1,568	4																	J. Moffatt.
Hansboro	Towner		2	19.3		57	8	− 10	28	47	0.79		0.46	6.3	4	11	6	13	nw.	Geo Dale.
Hillsboro	Traill	901	4	23.8		45	23	0	29†	33	0.62		0.30	3.4	5	4	11	15	nw.	M. H. Norman.
Lakota	Nelson	1,519	3	20.2		50	8	− 7•	29	36•	0.39		0.16	8.0	5	7	18	5	nw.	C. R. Pettes.
Langdon	Cavalier	1,615	14																	J. Woolner.
Larimore	Grand Forks	1,134	14	21.1	− 3.7	40•	7†	− 2	29	34•	0.90	+ 0.59	0.75	4.0	2	7	2	21	w.	Reuben Gray.
Lisbon	Ransom	1,091	5	29.0		55•	6†	4	30	47•	0.35		0.25	1.0	2	7	7	16	w.	H. K. Adams.
McKinney	Ward	1,640	15	20.2	− 2.7	60	8	− 7	28	52•	1.50	+ 0.86	1.00	15.0	3	6	14	10	nw.	N. P. Swenson.
Manfred	Wells	1,605	8	23.0		58	6†	− 5	30	46	0.40		0.20	4.0	3	6	14	10	nw.	P. B. Anderson.
Mayville	Traill	975	14																	N. C. McDonald.
Minot	Ward	1,557	11	23.2	− 7.8	64	8	− 6	28	47	0.87	+ 0.14	0.40	8.0	4	13	0	17	w.	Wm. J. Farris.
Minto	Walsh	820	16	22.4•	− 1.7	44	8†	− 2	29•	31•	0.34	− 0.27	0.18	T.	3	3	11	16	n.	S. S. Marsh.
Oriska	Barnes	1,270	4	24.5		51	6	1	29	42•	0.30		0.13	1.7	2	3	18	9	nw.	W. E. Williams.
Park River	Walsh	998	6	22.1		47	8	− 3	28	32	0.60		0.30	5.0	5				n.	A. Heyward.
Pembina	Pembina	789	11	26.1	+ 0.3	60	1	− 10	29	30	0.35	− 0.34	0.20	2.5	3	15	4	11	w.	C. W. Shumaker.
Power	Richland	1,020	17	23.8	− 2.1	48	7	− 2	30	39	0.02	− 0.56	0.02	0.2	1	9	3	18	w.	J. A. Power.
Pratt	McHenry		5	21.6		61	11	− 14	29	52	0.60		0.60	6.0	1	13	5	12	nw.	C. H. Butts.
Towner	do			19.8		60	8	− 12	29	44	0.30		0.20	3.0	2	8	12	10	nw.	Belle Bagley.
University	Grand Forks	830	18	21.9	− 3.7	44	8	− 4	29	34	0.87	+ 0.11	0.63	7.0	4	6	7	17	nw.	W. R. Holgate.
Wahpeton	Richland	962	18	22.0	− 6.2	44	23	− 3	30	33	0.02	− 0.51	0.02	0.2	1	11	5	14	nw.	E. G. Burch.
Walhalla	Pembina	966	5																	C. H. Lee.
Westhope	Bottineau		3																	C. W. Clark.
Willow City	do	1,471	16	19.4	− 1.3	64	3	− 21	30	45	0.30	− 0.16	0.20	3.0	2	7	14	9	nw.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	20	28.4	− 3.4	48	23	8	30	24	0.40	− 1.22	0.25	1.0	2	5	12	13	nw.	Edward Carey.
Alexandria	Douglas	1,391	16	23.7	− 4.6	46	23	1	30	32	0.38	− 0.36	0.20	2.6	4	9	3	18	nw.	P. O. Unumb.
Angus	Polk	870	8	20.1		43	8	− 11	30	33	0.45		0.35	4.5	3	3	10	17	n.	John Nadvornik.
Bagley	Clearwater		4	20.5		41	22	− 13	29	33	0.87		0.30	12.0	5	1	12	17	nw.	Jens Nelson.
Baudette	Beltrami	1,084	1																	Franz W. Schmidt.
Beardsley	Bigstone	1,000	17	26.2	− 2.6	49	23	− 1	30	26	0.37	− 0.38	0.30	1.0	3	2	10	18	nw.	Roy A. Smith.
Beaulieu	Mahnomen	1,200	8																	Elizabeth S. Cooper.
Bird Island	Renville	1,039	20	27.2	− 3.3	48	1†	4	30	35	0.35	− 0.53	0.31	0.4	2	5	5	20	nw.	Dr. F. L. Puffer.
Caledonia	Houston	1,179	17	27.7	− 5.6	49	7	12	30	31•	0.44	− 1.35	0.43	2.4	2	9	3	18	nw.	W. D. Belden.
Campbell	Wilkin	984																		J. T. Neiseas.
Cass Lake	Cass	1,300	4								1.30		0.75	9.0	4					C. W. Burns.
Collegeville	Stearns	1,282	17	28.2	− 3.0	46	24	5	30	23	0.23	− 0.65	0.13	0.9	3	15	1	14	nw.	Fridolin Tembreul.
Crookston	Polk	863	20	23.0	− 2.4	41	8	0	30	26	0.45	− 0.25	0.35	4.5	2	8	7	15	n.	A. G. Anderson.
Detroit	Becker	1,364	14	21.6	− 5.2	48	8	− 2	28†	37	0.65	− 0.08	0.26	5.2	4	4	13	13	ne.	George W. Peoples.
Fairmont (near)	Martin	1,240	23	28.4	− 2.9	50	4	8	30	29	0.33	− 1.03	0.12	2.6	4	7	18	5	nw.	W. F. Wherland.
Faribault	Rice	1,003	13	27.8	− 6.1	52	1	10	6†	27	0.57	− 0.54	0.19	4.7	5	7	5	18	nw.	Dr. A. R. T. Wylie.
Farmington	Dakota	902	22	28.1	− 2.8	50	1	9	30	27	0.50	− 0.85	0.20	3.5	5	8	7	15	nw.	D. F. Akin.
Fergus Falls	Ottertail	1,210	18	24.7	− 3.5	44	23	1	30	26	0.36	− 0.45	0.10	2.5	10	7	9	14	nw.	Chas. E. Kissenger.
Fort Ripley	Crow Wing	1,136	4	23.8		48	24	− 4	12	38	0.11	− 0.64	0.10	1.6	2	14	0	16	nw.	J. J. Tucker.
Fosston	Polk	1,289	1	20.6		42	8	− 7	30	31	0.74		0.28	0.4	5	2	10	18	nw.	O. N. Hem.
Fram	Marshall			20.6		43	1	− 10	29†	33	0.42		0.20	4.2	3	2	15	13	w.	A. W. Clark.
Glencoe	McLeod	1,000	14	28.5	− 3.7	55	1	7	30	30	0.20	− 0.89	0.15	0.5	2	11	13	6	nw.	C. G. Selvig.
Grand Meadow	Mower	1,338	23	28.4	− 2.3	50	24	8	30	33	0.44	− 0.96	0.18	4.8	4	8	10	12	nw.	C. F. Greening.
Hallock	Kittson	815	11	19.6	− 6.9	43	8	− 10	29	32	0.42	− 0.24	0.12	3.0	5	16	0	14	n.	D. A. Robertson.
Halstad	Norman	870	4	20.4		44	8	− 2	29	29	0.40		0.40	4.0	1	18	5	7	nw.	Aaron G. Holstrom.
Hinckley	Pine	1,050	5	26.2		49	1	4	29	27	1.12		0.75	4.0	2	2	7	21	nw.	W. R. Newman.
International Falls	Koochiching	1,112	2	22.5		49	11	2	30	32	1.45		0.40	14.5	6	5	18	7	w.	Rees Roe.
Kelliher	Beltrami		3	22.0		46	23	− 8	29	26	0.52		0.26	5.3	4	0	14	16	nw.	A. Gilmour.
Lake Crystal	Blue Earth		3	28.9		49	23	8	6†	38	0.23		0.10	1.5	3	14	2	14	nw.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	22	21.3	− 4.6	44	1	− 4	29	25	0.89	− 0.18	0.23	8.7	7	0	12	18	nw.	Hans Olson.
Little Fork	Koochiching			19.0		42	23	− 6	30	33	1.29		0.50	12.9	4	13	2	15		O. C. Olson.
Long Prairie	Todd	1,299	18	22.8	− 5.2	47	23	1	5†	40	0.15	− 0.84	0.15	1.5	1	9	7	14	nw.	R. M. Sheets.
Lynd (2)	Lyon	1,175	18	29.2	− 2.2	55	8	7	17	41	0.40	− 0.58	0.32	1.0	2	10	6	11	n.	J. W. Rouse.
Mankato	Blue Earth	747	11								0.36	− 0.95	0.17		3	11	7	12	sw.	Sadie H. Blake.
Mapleplain	Hennepin	1,023	18	27.4	− 3.2	50	4	7	30	27	0.55	− 0.79	0.25	4.0	8	10	3	17	nw.	G. W. Richards.
Milaca	Millelacs	1,072	13	26.2	− 5.6	57	24	3	30	32	0.42	− 0.89	0.19	4.5	3	5	11	14	nw.	C. H. Foss.
Milan	Chippewa	955	16	26.8	− 2.7	50	8	4	30	33	0.62	− 0.33	0.27	2.0	4	5	14	11	nw.	O. K. Opjorden.
Minneapolis	Hennepin	918	19	27.8	− 4.8	50	4	8	30	21	0.59	− 0.59	0.16	3.9	8	9	5	16	nw.	U. S. Weather Bureau.
Montevideo	Chippewa	900	20	28.0	− 2.8	50	24	5	30	29	0.34	− 0.52	0.19	0.9	4	8	7	15	nw.	Lloyd G. Moyer.
Moorhead	Clay	935	29	24.0	− 0.4	44	8	2	30	33	0.49	− 0.49	0.26	3.8	4	6	9	15	nw.	U. S. Weather Bureau.
Mora	Kanabec		5	26.4		47	1†	6	6†	30	0.59		0.16	4.2	9	13	6	11	nw.	Hans Peterson.
Morris	Stevens	1,170	25	26.0	− 2.4	47	23	3	30	28	0.20	− 0.49	0.08	4.5	4	13	4	13	nw.	D. T. Wheaton.
New London	Kandiyohi	1,215	16	23.4	− 6.8	48	4	− 2	30	40	0.22	− 0.69	0.15	1.0	3	4	15	11	nw.	Harold Swenson.
New Richland	Waseca	1,180	16	29.0	− 3.7	53	1	8	30	28	0.46		0.40	2.0	2	10	12	8	nw.	N. O. Tyrholm.
New Ulm	Brown	791	30	27.4	− 4.5	51	23	7	30	32	0.30	− 0.85	0.10	1.8	5	9	0	21	nw.	Andrew J. Eckstein.
Osakis	Douglas	1,343	3	24.8		45	23	1	30	33	0.22		0.18	2.0	2	5	4	21	nw.	J. B. Johnson.
Park Rapids	Hubbard	1,426	20	21.6	− 4.2	42	1†	0	30	27	0.80	− 0.22	0.28	5.2	8	8	2	20	nw.	Dr. P. A. Walling.
Pine River Dam	Crow Wing	1,251	23	23.8	− 3.3	48	1	0	29	30	0.05	− 1.00	0.05	1.0	1	8	14	8	n.	Neil McKay.
Pokegama Falls	Itaska	1,280	23	22.4	− 2.4	42	1	− 10	29	27	0.89	− 0.37	0.38	9.5	5	3	8	19	nw.	Arthur L. Mampel.
Red Lake	Beltrami	1,152	2	22.2		44	22	− 9	28	25	1.08		0.36	9.5	6	5	10	15	w.	A. C. Goddard.
Red Wing	Goodhue	680	14								0.80	− 0.96	0.26	5.8	8	9	4	17	nw.	Louis Bach.
Redwood Falls	Redwood	1,050	3	29.0		53	1	6	30	32	0.58	− 0.41	0.38	1.0	4	15	8	7	nw.	N. B. Anderson.
Reeds Landing	Wabasha	681	15								0.44	− 1.05	0.28	2.7	5	7	4	19	nw.	John Deschneau.
Rochester	Olmsted	991	6	26.9		48	7†	9	6	33	0.20		0.20	2.0	1	10	2	18	n.	S. R. Case.
Roseau	Roseau	1,040	3	20.3		44	8	− 19	29	36	0.70		0.28	6.0	8	7	8	15	nw.	A. Waag.
St. Charles	Winona	850	19	26.4	− 5.3	48	7	9	6†	34	0.34	− 0.95	0.21	2.8	3	10	6	14	se.	S. W. Gleason.
St. Cloud	Sherburne	1,020	32	25.0	− 4.7	50	24	5	30	39	0.31	− 0.80	0.20	3.5	3	4	10	16	nw.	Jos. H. Capser.
St. Paul	Ramsey	837	39	28.1	− 2.8	47	23	8	30	19	0.48	− 0.82	0.14	4.0	7	7	10	13	nw.	U. S. Weather Bureau.
St. Peter	Nicollet	825	17	30.8	− 2.6	59	4	10	12†	29	0.09	− 1.11	0.06	0.7	2	11	6	13	nw.	Chas. C. Cavanaugh.
Sandy Lake Dam	Aitkin	1,234	17	24.6	− 2.8	49	1	− 2	29	25	0.34	− 0.97	0.19	5.9	4	5	14	11	nw.	U. S. Engineer Corps
State Sanatorium	Cass		3	22.2		44	23	− 2	29†	26	0.77		0.26	7.0	6	11	6	13	n.	Walter J. Marcinay.
Stillwater	Washington	694	5								0.37		0.16	4.5	6	13	1	16	nw.	Oscar Ostrom.
Taylors Falls	Chisago	759	3	28.1		55	1	3	30	30	0.29		0.21	5.0	2	6	8	16	nw.	Mpls. Gen. Elec. Co.

TABLE 1.—*Climatological data for November, 1910. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***Minnesota*—Continued.**																				
Warroad	Roseau	1,069	1	20.2	.....	41	8	− 18	29	33	0.78	.....	0.23	8.5	5	6	3	21	nw.	John H. Sawyer.
West Concord	Dodge	1,232	1	27.2	.....	48	1	9	30	25	0.30	.....	0.20	3.0	2	11	12	7	nw.	H. H. Orcutt.
Willow River	Pine	1,046	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Brandt.
Windom	Cottonwood	1,336	4	30.5	.....	55	1	7	30	38	0.11	.....	0.11	0.5	1	6	16	8	nw.	Taber C. Richmond.
Winnebago	Faribault	1,100	11	29.8	− 5.4	52	4	9	17	34	0.19	− 1.29	0.10	1.0	2	6	5	19	nw.	H. H. Haight.
Winnibigoshish	Itasca	1,300	22	23.0	− 3.1	44	23	− 3	29†	23	1.07	− 0.02	0.35	10.2	7	2	9	19	nw.	John Duncan.
Winona	Winona	700	15	30.2	− 3.6	48	7†	13	30	22	0.44	− 1.08	0.33	1.5	5	11	6	13	w.	Perry C. Meyrs.
Worthington	Nobles	979	15	28.7	− 3.1	54	8	7	11†	36	0.08	− 1.19	0.06	1.1	2	13	8	9	nw.	Milton P. Mann.
Zumbrota	Goodhue	917	15	28.1	− 4.3	51	1	9	3†	27	0.15	.....	0.13	1.2	2	11	11	8	nw.	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	18	26.9	− 3.5	55	8	5	30	36	0.28	− 0.46	0.18	1.7	3	11	2	17	nw.	I. T. Patridge.
Wisconsin.																				
Antigo	Langlade	1,489	16	26.6	− 4.8	45	1	14	3	25	0.44	.....	0.15	4.5	7	6	2	22	w.	Elton C. Larzelere.
Barron	Barron	1,115	18	24.6	− 1.3	44	24	4	5	24	1.40	+ 0.02	0.50	9.5	7	4	13	13	nw.	Wm. A. Kent.
Beloit	Rock	750	23	34.8	− 2.1	60	9	17	30	31	2.00	+ 0.09	0.95	T.	5	14	0	16	w.	Smith Observatory.
Big St. Germain Dam §	Vilas	1,590	1	25.8	.....	46	1	9	24	37	1.71	.....	0.50	8.2	7	5	1	24	nw.	Oscar Brehmer.
Brodhead	Green	812	12	31.6	− 6.3	55	7	14	6	32	1.59	− 0.22	1.05	0.6	6	13	7	10	nw.	Hecktore D. Kirkpatrick.
Burnett	Dodge	880	6	28.7	.....	50	9	9	6	29	2.27	.....	1.50	7.5	8	4	6	20	nw.	Geo. W. Smith.
Darlington	Lafayette	867	5	29.9	.....	59	1	14	30	35	.....	.....	.....	.....	.....	20	2	8	nw.	S. P. Nelson.
Deerskin Dam §	Forest	1,625	1	25.4	.....	43	1	6	24	34	0.85	.....	0.30	5.8	6	2	8	20	w.	Wm. E. O'Neal.
Delavan	Walworth	920	17	30.6	− 3.0	62	9	15	6	35	1.96	+ 0.11	0.72	1.5	8	8	4	18	nw.	Elwood S. Austin.
Dodgeville	Iowa	1,116	11	29.6	− 5.3	60	1	12	5	42	1.38	− 0.52	0.92	2.5	4	13	2	15	nw.	Geo. W. Butler.
Downing	Dunn	983	8	25.6	.....	50	24	− 1	6	30	0.75	.....	0.40	7.5	4	2	0	28	w.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	19	28.3	− 3.8	55	1	9	30	23	0.69	− 0.98	0.24	8.1	6	4	9	17	nw.	Robert D. Whitford.
Grand Rapids	Wood	1,021	11	26.8	− 5.9	48	1	11	3	27	0.46	− 1.22	0.13	4.0	7	3	6	21	w.	Willis B. Raymond.
Grantsburg	Burnett	1,095	19	26.6	− 4.2	47	1	4	6	30	0.72	− 0.72	0.30	7.2	4	8	5	17	nw.	Theodore Olsen.
Hancock	Waushara	1,091	18	28.0	− 5.0	51	1	12	3	25	1.10	− 0.30	0.50	6.0	5	3	8	19	nw.	Frederick B. Hamilton.
Hatfield	Jackson	973	15	28.6	− 3.8	55	1	10	30	29	1.36	− 0.25	0.50	6.0	6	3	7	20	nw.	Walter S. Woods.
Hayward	Sawyer	1,197	19	24.8[h]	− 4.4	46	1	10	5[h]	25[h]	0.50	− 1.04	0.30	5.0	2	1[h]	4[h]	17[h]	w.	William E. Swain.
Hillsboro	Vernon	1,000	19	26.8	− 6.0	50	7	6	3	30	0.80	− 0.83	0.35	4.5	4	11	9	10	e.	Emil V. Wernick.
Koepenick	Langlade	1,683	20	24.6	− 6.8	50	1	10	3	30	2.10	+ 0.12	0.40	18.0	10	0	21	9	nw.	Edward S. Koepenick.
Lac du Flambeau §	Vilas	.....	.....	27.4[c]	.....	45	5	16	6	24[c]	.....	.....	.....	.....	.....	0[c]	3[c]	20[c]	n.	W. J. Lovett.
La Crosse	La Crosse	714	38	29.8	− 4.0	52	7	14	30	24	0.46	− 1.06	0.36	1.7	5	7	7	16	nw.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	19	29.6	− 5.1	56	9	13	30	28	1.39	− 0.72	0.68	2.4	9	4	13	13	nw.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	20	29.5	− 4.4	55	7	11	6	34	1.14	− 0.62	0.88	2.5	5	8	12	10	w.	Edward Pollock.
Long Lake	Oneida	1,592	2	25.0	.....	40	1	5	24	35	1.10	.....	0.52	9.6	13	0	4	26	nw.	Louie Frank.
Madison	Dane	974	32	30.0	− 4.2	52	9	15	30	25	1.59	− 0.21	0.88	2.7	10	8	7	15	nw.	U. S. Weather Bureau.
Mather	Juneau	962	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Evans.
Mauston	do	882	14	29.2	− 5.5	53	1	8	3	27	1.20	− 0.44	0.55	5.0	3	11	7	12	nw.	Eugene L. Hitchcock.
Meadow Valley	do	974	19	27.6	− 4.7	49	1	7	3	28	0.62	− 0.91	0.38	7.0	4	1	14	15	nw.	Charles H. Johnson.
Medford	Taylor	1,420	19	26.0	− 4.2	48	1	10	17	25	0.60	− 0.97	0.20	6.0	5	3	9	18	w.	William Zeit.
Merrill	Lincoln	1,267	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank M. McElroy.
Minocqua	Vilas	1,604	6	24.6	.....	50	24	8	20	39	0.98	.....	0.32	4.5	7	0	2	28	nw.	Benjamin W. Appiebee.
Mondovi	Buffalo	738	2	28.2	.....	50	1	9	6	23	0.57	.....	0.27	7.0	5	12	3	15	nw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	6	29.4	.....	54	7	9	6	30	1.35	.....	0.60	5.0	8	9	15	6	nw.	W. M. Lewis.
Muscoda	Grant	666	1	30.4	.....	50	6	15	6	35	1.52	.....	0.80	1.2	5	6	10	14	w.	Henry Eckstein.
Neillsville	Clark	996	21	27.0	− 4.3	47	9	10	30	27	0.90	− 0.84	0.35	3.5	5	7	0	23	nw.	William Heaslett.
New Richmond	St. Croix	990	5	26.9	.....	47	1	6	6	31	1.19	.....	0.50	8.0	5	2	15	13	nw.	Frank A. R. Van Meter.
Osceola	Polk	806	19	26.4	− 3.3	49	23	5	6	36	0.37	− 1.02	0.30	4.0	3	9	3	18	n.	Charles W. Staples.
Park Falls §	Price	1,492	18	24.4	.....	47	24	10	25	36	0.39	.....	0.20	3.5	4	10	14	6	nw.	Flambeau Paper Co.
Portage	Columbia	809	14	.....	.....	.....	.....	.....	.....	.....	1.55	+ 0.01	1.15	.....	2	.....	.....	.....	.....	James Clear.
Prairie du Chien	Crawford	690	23	29.6	− 6.8	56	7	14	6	40	0.46	− 1.11	0.26	T.	3	13	4	13	nw.	Jas. A. Gillis.
Prentice	Price	1,551	12	23.6	− 8.1	48	1	4	29	37	1.54	− 0.21	0.42	12.2	8	0	3	27	nw.	Joseph G. Lash.
Rhinelander	Oneida	1,550	4	25.7	.....	45	1	13	3	24	1.11	.....	0.34	10.9	10	2	5	23	nw.	John Lind.
Sauk City	Sauk	758	2	30.0	.....	53	7	14	3	39	.....	.....	.....	.....	.....	7	5	18	.....	Kilien Derieth.
Shullsburg	Lafayette	1,019	4	29.6	.....	57	9	10	6	27	0.76	.....	0.34	1.8	5	10	6	14	nw.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John M. Sayles.
Spooner	Washburn	1,104	15	25.6	− 4.7	42	1	5	29	20	0.39	− 1.14	0.24	4.5	2	12	10	8	w.	Horace A. Bresee.
Stanley	Chippewa	1,082	6	26.8	.....	52	1	8	30	23	0.55	.....	0.26	4.2	5	4	5	21	nw.	W. Humphrey Scott.
Stevens Point	Portage	1,113	17	27.4[c]	− 5.3	49	1	7	3	32[c]	0.82	− 0.90	0.62	2.0	4	5	6	19	nw.	Garry E. Culver.
Sugar Camp Dam §	Oneida	1,582	1	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.15	9.2	15	.....	.....	.....	nw.	Robert Hayes.
Twin Lakes Dam §	Vilas	1,625	1	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0.30	10.0	7	1	10	19	n.	Albert D. Hansen.
Valley Junction	Monroe	930	18	28.5	− 4.5	52	1	4	3	30	1.35	− 0.29	0.31	7.0	7	5	4	21	nw.	Frederick Muermann.
Viroqua	Vernon	1,412	19	29.2	− 3.8	55	1	12	30	24	0.44	− 1.23	0.22	2.0	5	9	6	15	nw.	Henry E. Rogers.
Vudesare	Vilas	1,600	2	24.2	.....	41	1	10	24	29	0.89	.....	0.25	11.5	8	2	6	22	nw.	Louis L. Thomas.
Watertown	Jefferson	824	19	30.4	− 3.6	53	9	15	30	22	3.15	+ 1.35	1.42	2.5	11	8	9	13	nw.	Charles J. Salick.
Waukesha	Waukesha	864	14	31.4	− 4.8	56	9	16	30	28	2.87	+ 1.11	1.70	2.2	8	2	23	5	nw.	Carroll College.
Wausau	Marathon	1,212	17	28.4	− 3.9	57	1	12	3	27	1.41	− 0.29	0.35	3.0	9	3	16	11	nw.	George H. Halder.
Weyerhauser	Rusk	1,297	3	25.3	.....	47	1	5	30	31	1.03	.....	0.20	10.4	9	1	11	18	nw.	Miss Etta Stiles.
Whitehall	Trempealeau	675	18	25.8	− 8.1	50	8	− 1	6	39	0.30	− 1.09	0.30	3.0	1	15	0	15	nw.	Hans J. Haugh.
Iowa.																				
Albia §	Monroe	959	12	34.3	− 4.4	66	7	13	30	41	0.52	− 1.25	0.47	0.5	2	13	6	11	nw.	J. I. Chenoweth.
Algona §	Kossuth	1,213	36	30.6	− 2.2	53	7	10	30	32	0.29	− 0.99	0.17	1.5	2	16	10	4	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	19	31.6	− 0.9	60	7	9	30	34	0.23	− 1.00	0.15	0.5	5	8	17	5	nw.	David E. Hadden.
Amana	Iowa	721	34	32.1	− 1.7	58	9	13	30	31	0.59	− 1.14	0.34	0.5	6	13	10	7	nw.	C. Schadt.
Ames	Story	926	34	33.6	− 0.5	60	7	12	17†	34	0.12	− 1.07	0.12	T.	1	10	14	6	n.	Iowa State College.
Baxter §	Jasper	998	10	33.5	− 3.8	61	7	11	29	36	0.68	− 0.65	0.45	T.	4	12	10	8	nw.	W. R. Vandike.
Belle Plaine	Benton	828	20	31.9	− 3.0	60	7	12	3†	34	0.67	− 1.05	0.42	3.5	4	12	8	10	nw.	S. P. Van Dike.
Belmond	Wright	.....	.....	30.1	.....	54	7	9	30	30	0.33	.....	0.16	1.9	3	1	23	6	nw.	Geo. P. Hardwick.
Bloomfield §	Davis	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. R. Davis.
Bonaparte §	Van Buren	.....	19	35.6	− 2.9	68	7	11	3	34	0.53	− 1.27	0.30	1.0	2	.....	.....	.....	.....	B. R. Vale.
Boone	Boone	1,134	5	33.0	.....	62	7	12	30	37	0.38	.....	0.38	T.	1	.....	.....	.....	.....	Carl Fritz Henning.
Britt §	Hancock	1,236	13	29.8	− 3.8	52	7	9	29†	33	0.15	− 0.96	0.09	0.9	2	11	15	4	nw.	L. M. Goodman.
Buckingham	Tama	.....	10	.....	.....	.....	.....	.....	.....	.....	0.39	.....	0.17	1.8	4	.....	.....	.....	.....	W. A. Daniel.
Burlington	Des Moines	544	14	35.0	− 4.7	70	7	12	30	47	0.97	− 0.81	0.50	0.5	4	19	0	11	nw.	Max E. Poppe, Jr.
Carroll	Carroll	1,265	20	31.0	− 1.2	62	6	6	30	39	T.	− 1.13	T.	0.0	0	12	10	8	nw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	28	31.4	− 4.5	59	9	16	30	37	0.49	− 0.91	0.28	0.8	3	18	0	12	nw.	W. J. Greene.
Charles City	Floyd	1,015	19	29.2	− 3.8	52	7	10	30	26	0.29	− 1.10	0.19	1.8	2	5	9	16	nw.	U. S. Weather Bureau.
Clear Lake §	Cerro Gordo	1,241	12	31.4	− 2.7	55	7	8	30	35	0.20	− 0.87	0.20	2.0	1	11	1	18	n.	Oscar Stevens.
Clinton	Clinton	593	43	33.2	− 2.5	65	9	15	22	32	0.58	− 1.26	0.11	T.	7	5	11	14	nw.	Luke Roberts.
Columbus Junction §	Louisa	595	9	34.6	.....	62	9	11	3	32	0.43	.....	0.20	0.2	4	18	6	6	nw.	J. B. Johnston.
Davenport	Scott	580	39	33.8	− 3.7	63	9	14	30	29	0.22	− 1.54	0.07	T.	4	14	4	12	nw.	U. S. Weather Bureau.
Decorah	Winneshiek	875	17	29.4	− 4.1	51	7	9	3	31	0.26	− 1.29	0.24	0.0	2	.....	.....	.....	.....	F. H. Baker.
Delaware	Delaware	1,083	19	30.4	− 2.4	57	9†	12	30	26	0.65	− 0.92	0.23	2.8	6	12	11	7	nw.	William Ball.
Des Moines	Polk	861	32	35.4	− 1.4	62	7	15	30	36	0.53	− 0.95	0.42	0.4	5	7	14	9	nw.	U. S. Weather Bureau.
De Soto §	Dallas	866	10	35.6	− 3.1	65	7	13	3†	41	0.56	− 0.66	0.56	T.	1	.....	.....	.....	nw.	R. D. Minard.
Dubuque	Dubuque	639	37	32.4	− 3.6	59	9	16	30	29	0.53	− 1.28	0.22	1.7	7	11	7	12	nw.	U. S. Weather Bureau.
Earlham	Madison	.....	8	35.1	.....	65	7†	12	16†	37	0.52	.....	0.44	T.	2	13	4	13	nw.	George Phillips.

TABLE 1.—*Climatological data for November, 1910. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Iowa—Continued.																			
Elkader	Clayton	727	31	37.2	+ 4.0	64	25	20	30	35	0.66	− 0.99	0.27	1.0	3	14	8	8	.....	Chas. Reinecke.
Elma	Howard	1	28.8	.....		50	1†	9	29†	27	0.22	.....	0.10	2.5	3	3	15	9	nw.	H. A. Moore.
Estherville	Emmet	1,298	15	28.0	− 3.3	53	8	9	30	31	0.10	− 1.14	0.08	1.0	2	23	0	7	nw.	A. O. Peterson.
Fairfield	Jefferson		26	34.9	− 2.0	63	9	14	3†	32	0.48	− 1.80	0.23	0.2	5	.....	.....	.....	nw.	R. Monroe McKenzie.
Fayette §	Fayette	1,003	20	29.4	− 3.5	54	7	11	3†	29	0.28	− 1.34	0.18	1.8	2	17	4	9	nw.	R. Z. Latimer.
Forest City §	Winnebago	1,226	16	28.4	− 4.0	50	7†	12	12†	31	T.	− 1.23	T.	T.	0	6	11	13	w.	J. A. Peters.
Fort Dodge	Webster	1,126	10	31.6	− 3.6	59	7	11	30	33	0.16	− 1.06	0.16	T.	1	17	1	12	nw.	J. F. Monk.
Fort Madison	Lee	516	61	.....	.....	.....	.....	.....	.....	.....	0.70	− 1.44	0.30	0.0	3	12	9	9	w.	Miss L. A. McCready.
Gilman	Marshall	1,052	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	19	29.3	− 3.7	55	7	10	30	30	0.35	− 1.21	0.12	2.0	5	9	9	12	nw.	F. L. Williams.
Greene	Butler		12	30.6	− 5.3	56	1	10	30	30	0.17	− 0.98	0.11	1.5	2	3	13	14	nw.	J. L. Cole.
Grinnell	Poweshiek	1,023	18	34.6	− 1.4	61	7	13	30	31	0.98	− 0.65	0.45	2.0	6	13	11	6	w.	D. W. Brainard.
Grundy Center §	Grundy	976	19	32.4	− 1.6	57	7	12	30	28	0.07	− 1.15	0.05	0.0	2	17	0	13	nw.	J. B. Calderwood.
Guthrie Center §	Guthrie	1,077	15	34.9	− 2.4	63	7	11	3†	37	0.35	− 0.80	0.24	T.	3	16	6	8	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	20	31.6	− 1.8	55	7	10	30	33	0.31	− 1.25	0.18	0.5	2	6	13	11	nw.	E. C. Grenello.
Humboldt	Humboldt	1,095	22	32.6	− 1.4	56	1	10	29	35	0.29	− 1.08	0.13	T.	3	15	13	2	nw.	Henry S. Wells.
Independence §	Buchanan	921	46	31.2	− 1.4	57	1	11	22	37	0.05	− 1.27	0.05	0.5	1	15	8	7	nw.	George Donohoe.
Indianola	Warren	969	19	36.4	− 1.9	67	9	15	30	36	0.47	− 0.95	0.35	0.6	3	18	5	7	nw.	John L. Tilton.
Iowa City	Johnson	683	50	31.5	− 4.2	58	7	9	30	37	0.69	− 1.57	0.20	T.	6	14	4	12	nw.	Prof. A. E. Smith.
Iowa Falls	Hardin	1,170	17	29.8	− 3.3	56	7	10	29	34	0.31	− 0.94	0.20	3.1	3	16	1	13	nw.	J. B. Parmelee.
Jefferson §	Greene		11	34.2	.....	62	7	5	3	43	0.05	− 1.26	0.05	0.0	1	9	14	7	nw.	G. W. Jackson.
Keokuk	Lee	547	39	37.6	− 1.8	66	7	18	30	34	0.23	− 1.62	0.19	0.0	3	9	12	9	nw.	U. S. Weather Bureau.
Keosauqua §	Van Buren	644	18	35.2	− 3.7	69	7	12	3†	48	0.60	− 0.90	0.27	T.	4	6	12	12	.....	J. H. Landes.
Knoxville §	Marion	930	15	36.0	.....	63	7	15	30	32	0.63	.....	0.40	2.0	2	15	6	9	nw.	Casey & Belville.
Lacona	Warren		11	.....	.....	.....	.....	.....	.....	.....	0.81	− 0.66	0.56	3.0	3	7	18	5	.....	J. B. Alter.
Le Claire	Scott	576	10	.....	.....	.....	.....	.....	.....	.....	0.48	− 0.99	0.16	T.	9	.....	.....	.....	.....	Miss M. T. Disney.
Marshalltown §	Marshall	947	18	32.4	− 3.6	63	7	10	17	41	0.70	− 0.59	0.28	T.	6	11	8	11	nw.	Ralph B. Reasoner.
Mason City §	Cerro Gordo	1,132	13	29.3	− 3.5	50	1†	10	16†	26	0.25	− 1.39	0.15	T.	2	9	14	7	nw.	J. S. Mills.
Mount Pleasant §	Henry	729	29	35.0	− 2.4	64	9	15	30	38	0.59	− 0.97	0.23	1.0	6	13	7	10	nw.	J. W. Edwards.
Muscatine	Muscatine		50	.....	.....	.....	.....	.....	.....	.....	0.42	− 1.88	0.20	T.	5	.....	.....	.....	.....	William Molis.
New Hampton §	Chickasaw	1,109	13	29.6	− 5.1	50	1†	9	30	27	0.22	− 1.18	0.12	1.0	2	9	12	9	nw.	A. F. Kemman.
Newton §	Jasper	944	22	35.5	+ 0.7	62	1	14	30	30	0.36	− 1.20	0.19	2.0	2	13	11	6	nw.	J. P. Beatty.
Northwood §	Worth	1,222	14	29.2	− 4.0	51	9	8	30	29	0.33	− 1.15	0.20	3.3	3	10	12	8	nw.	Chas. H. Dwelle.
Olin §	Jones	760	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. M. Miles.
Osage	Mitchell	1,184	23	30.1	− 0.8	52	7†	10	30	30	0.29	− 1.14	0.17	3.0	2	9	8	13	nw.	A. D. Bundy.
Oskaloosa §	Mahaska	843	34	34.8	− 2.2	62	7	11	3	35	0.43	− 1.06	0.15	0.5	4	16	3	11	nw.	Joseph Boyd.
Ottumwa	Wapello	649	15	38.0	− 1.5	68	7	12	28	33	0.18	− 1.42	0.18	T.	1	17	4	9	nw.	W. J. Mesmer.
Pella	Marion	877	8	34.8	.....	63	7	11	3	36	0.49	.....	0.38	0.8	5	21	0	9	nw.	John H. Ver Steeg.
Perry §	Dallas	975	9	34.4	− 3.4	61	7	12	30	44	0.32	− 1.13	0.32	0.0	1	13	11	6	nw.	Ed. S. Gray.
Plover	Pocahontas	1,426	14	31.8	− 2.5	67	1	8	29	35	0.20	− 1.42	0.20	T.	1	17	11	2	nw.	J. S. Smith.
Pocahontas §	do	1,248	6	31.8	.....	55	7	10	30	32	0.11	.....	0.05	0.5	3	15	9	6	nw.	F. E. Hronek.
Ridgeway §	Winneshiek	1,215	12	31.0	− 6.2	57	7†	10	30	33	0.63	− 1.19	0.54	3.8	6	10	12	8	nw.	Arthur Betts.
Rockwell City §	Calhoun		14	35.0	0.0	60	1†	12	12†	39	0.20	− 0.90	0.20	T.	1	18	8	4	.....	C. M. Randall.
Sac City	Sac	1,278	34	33.4	− 0.1	60	7	12	30	34	T.	− 1.11	T.	T.	0	13	9	8	nw.	E. N. Baily.
St. Charles §	Madison	1,070	9	37.1	.....	69	7	14	30	38	0.60	.....	0.42	3.0	4	16	7	7	nw.	R. D. Minard.
Sigourney §	Keokuk	877	14	34.8	− 4.1	60	1†	12	11	33	0.52	− 1.03	0.29	0.5	5	3	18	9	nw.	J. T. Parker.
Stockport §	Van Buren		8	34.6	.....	66	7	8	3	38	0.54	.....	0.26	0.5	5	16	5	9	nw.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. B. Fracker.
Stuart	Guthrie	1,216	11	33.6	− 2.4	64	7	11	29	40	T.	− 0.92	T.	T.	0	6	20	4	nw.	J. P. Fox.
Tipton §	Cedar	807	11	34.0	− 2.8	59	9	14	30	27	0.77	− 1.05	0.35	2.0	5	.....	.....	.....	nw.	F. K. Gregg.
Toledo §	Tama	856	16	32.4	− 4.0	58	7	12	3†	32	0.50	− 1.01	0.25	3.0	3	14	7	9	nw.	I. F. Giger.
Wapello §	Louisa	588	12	35.4	− 5.8	62	9	17	30	29	0.38	− 1.02	0.16	T.	4	17	5	8	nw.	G. W. Schofield.
Washington	Washington	709	28	34.2	− 2.0	62	9	14	30	31	0.41	− 1.00	0.23	0.0	4	11	12	7	nw.	Wm. A. Cook.
Waterloo	Black Hawk	862	27	32.7	− 3.0	59	7	12	30	32	0.44	− 1.01	0.17	2.5	5	13	10	7	nw.	M. L. Newton.
Waukee	Dallas	1,039	7	34.6	.....	62	7	12	29	36	0.55	.....	0.52	0.5	4	18	6	6	nw.	Samuel F. Poft.
Waverly §	Bremer	948	14	31.6	− 3.5	59	1	10	30	30	0.13	− 1.27	0.13	0.0	1	19	4	7	nw.	H. S. Hoover.
Webster City §	Hamilton		5	33.0	.....	58	7	10	29	31	0.17	.....	0.17	T.	1	13	10	7	nw.	C. D. Carpenter.
West Bend §	Palo Alto	1,197	17	30.6	− 1.9	54	7†	9	29	33	0.19	− 1.15	0.12	0.6	3	10	13	7	.....	Joseph Dorweiler.
Whitten §	Hardin	1,036	13	31.6	− 3.7	57	7	9	3†	33	T.	− 1.13	T.	T.	0	10	12	8	nw.	F. P. Butler.
Winterset §	Madison	1,129	19	35.3	− 1.5	64	7	14	30	34	0.26	− 1.03	0.26	0.5	1	5	17	8	nw.	Robert S. Cooper
Missouri.																				
Gorin	Scotland	700	24	.....	.....	.....	.....	.....	.....	.....	0.41	− 1.75	0.30	0.0	2	7	12	11	nw.	J. W. Pulliam.
Hannibal	Marion	534	18	38.0	− 2.5	71	9	18	17	38	0.13	− 1.82	0.07	T.	3	10	11	9	nw.	U. S. Weather Bureau.
Louisiana	Pike	500	32	37.6	− 6.5	74	9	12	17	45	1.07	− 1.17	0.70	T.	4	18	5	7	ne.	J. T. Farrell.
Mexico	Audrain	797	32	39.2	− 3.7	75	9	16	17	42	0.22	− 2.22	0.13	T.	3	15	6	9	nw.	J. F. Llewellyn.
Steffenville	Lewis	576	17	39.1	− 4.5	70	7	15	16†	38	0.85	− 1.36	0.50	T.	3	11	9	10	nw.	Frank Hall.
Sublett	Adair	1,000	30	38.2	− 2.6	69	7†	11	29	43	T.	− 1.84	T.	0.0	0	14	9	7	nw.	Lewis Spriggs.
Warrenton	Warren	805	20	39.0	− 3.8	68	1	19	30	37	0.79	− 2.00	0.45	T.	4	9	9	12	n.	Dr. J. H. Frick.
Indiana.																				
Collegeville	Jasper		11	35.8	− 5.2	68	9	11	19	37	1.19	− 1.31	0.40	T.	7	8	8	14	w.	Prof. L. C. Klosterman.
Knox	Starke	716	5	35.7	.....	67	9	19	6†	34	1.32	.....	0.32	3.2	11	6	13	11	n. w.	W. R. R. Tatman.
Laporte	Laporte	810	14	35.6	− 4.1	64	9	20	21	31	1.50	− 1.28	0.35	4.0	11	5	8	17	n. w.	Wm. M. Walton, jr.
Plymouth	Marshall	700	7	34.9	.....	63	9	20	20	28	1.21	.....	0.35	1.0	11	7	8	15	w.	J. W. Siders.
Illinois.																				
Aledo	Mercer	738	10	34.4	− 3.7	64	9	15	30	34	0.42	− 1.45	0.16	0.5	5	11	10	9	n. w.	Wm. B. Frew.
Alexander	Morgan	670	17	37.8	− 4.7	73	9	14	12	38	1.14	− 0.92	0.98	T.	4	12	8	10	n. w.	George H. Hall.
Antioch	Lake	861	9	32.6	.....	62	9	17	30	32	2.00	.....	2.00	T.	1	8	11	11	n. w.	J. C. James, jr.
Astoria	Fulton	650	11	36.2	− 4.6	71	9	15	12	43	1.67	− 0.19	1.35	T.	3	13	9	8	n. w.	Ed. V. Bohl.
Aurora	Kane	687	31	33.3	− 4.1	66	9	17	6	35	1.44	− 1.00	1.20	T.	6	8	9	13	s. w.	W. Holden.
Bement	Piatt	700	3	38.4	.....	71	9	16	22	41	1.91	.....	1.70	0.0	3	14	11	5	n. w.	Rev. C. S. Adams.
Benton	Franklin	598	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. H. Stamper.
Bloomington	McLean	840	19	36.8	− 4.0	70	9	17•	30	34•	0.64	− 1.90	0.59	T.	2	10	7	13	n. w.	Prof. H. N. Pearce.
Cairo	Alexander	359	33	45.2	− 1.7	74	27	27	30	34	0.55	− 3.47	0.37	T.	4	14	5	11	n. w.	U. S. Weather Bureau.
Carbondale	Jackson	412	.....	43.0	.....	77	27	18	18	42	0.25	.....	0.09	0.0	4	17	7	6	n. w.	State Normal University.
Carlinville	Macoupin	663	20	39.4	− 3.4	74	9	16	7	42	0.44	− 2.14	0.39	0.0	2	16	8	6	n. w.	R. O. Purviance.
Clinton	Dewitt	727	.....	37.6	.....	70	9	15	12	40	1.89	.....	1.70	0.0	4	13	11	6	n. w.	J. F. Ziegler.
Coatsburg	Adams	763	18	37.0	− 4.3	66	9	17	30	33	0.05	− 1.99	0.05	T.	1	17	3	10	n. w.	Dr. J. R. Lambert.
Cobden	Union	656	27	45.4	− 1.7	78	27	22	3	42	0.26	− 3.96	0.16	0.0	3	15	5	10	n.	John Buck
Dakota	Stephenson	929	5	30.4	.....	53	1†	11	6	25	1.37	.....	0.75	2.0	6	8	11	11	w.	Rev. G. W. Kerstetter.
Decatur	Macon	685	19	36.9	− 4.6	70	9	17	12	43	2.84	+ 0.34	2.67	0.0	3	18	7	5	n. w.	Prof. J. H. Coonradt.
Dixon	Lee	725	20	32.2	− 4.6	66	9	15	22	43	0.85	− 0.74	0.52	0.0	7	16	10	4	.....	H. V. Bardwell.
Duquoin	Perry	459	22	43.2	− 2.2	75	26	20	18	39	0.31	− 2.57	0.14	0.0	3	18	8	4	s. w.	G. H. Knetzger.
Dwight	Livingston	600	17	35.6	− 3.9	69	9	16	22	37	0.26	− 2.28	0.06	T.	6	9	9	12	n. w.	Ed. O. Welch.
Elgin §	Kane	716	3	34.4•	.....	58	1	18	6	31	1.15	.....	0.90	T.	5	0	21	9	n. w.	Elgin Observatory.
Galva	Henry	842	18	33.6	− 4.3	66	9	15	12†	42	0.32	− 1.48	0.12	0.5	5	15	4	11	n. w.	Prof. F. U. White.
Greenville	Bond	635	32	39.6	− 3.1	70	9	20	12†	33	0.32	− 3.04	0.30	0.0	2	14	7	9	n. w.	M. S. Oudyn.
Griggsville	Pike	650	25	39.0•	− 3.0	77	9	17•	30	52•	1.36	− 0.84	1.24	0.0	2	9	9	12	n. w.	Geo. F. Kneeland.
Halfway	Williamson	500	14	43.2	− 4.5	73	27	21	12†	35	0.40	− 2.16	0.18	0.0	3	15	4	11	n. w.	E. L. Hearn.

TABLE 1.—*Climatological data for November, 1910. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Illinois—Continued.																				
Havana	Mason	475	18	39.2[b]	— 3.0	70	9	18[d]	30	40[d]	1.19	— 0.93	0.86	0.0	3	10	16	4	w.	F. & C. Borgelt.
Henry	Marshall	500	22	35.6	— 3.1	67	9	13	12†	40	0.54	— 1.83	0.34	0.0	5	13	9	8	n. w.	Dr. F. A. Powell.
Hillsboro	Montgomery	675	16	40.2	— 4.0	73	9	18	12†	38	1.05	— 1.56	1.05	0.0	1	15	0	15	n. w.	Ira L. Woodward.
Joliet	Will	541	19	33.7	— 5.3	67	9	14	19	38	0.62	— 1.65	0.14	0.3	8	14	2	14	n. w.	F. M. Muhlig.
Kishwaukee	Winnebago	730	22	32.8	— 4.3	67	9	15	6	33	1.14	— 1.06	0.55	2.0	6	8	10	12	n. w.	Geo. Stevens.
La Grange	Cook	657	18	34.2	— 4.1	68	9	18	6†	31	1.73	— 0.60	1.12	1.0	5	8	7	15	n. w.	Prof. F. E. Sanford.
La Harpe	Hancock	698	31	34.9	— 4.8	65	9	11	3	33	0.11	— 1.85	0.11	T.	1	12	8	10	n. w.	Jno. S. Campbell.
Lanark	Carroll	883	21	31.0	— 5.1	63	9	10	22	37	0.71	— 1.23	0.25	1.5	7	18	7	5	n. w.	M. N. Wertz.
La Salle	La Salle	536	33	34.5	— 3.3	65	9	18	30	32	0.77	— 1.87	0.53	T.	8	12	5	13	w.	U. S. Weather Bureau.
Lincoln	Logan	482	22	36.8	— 4.5	70	9	10	12	39	1.12	— 1.19	0.82	T.	3	12	12	6	n. w.	Prof. C. S. Oglevee.
Martinton	Iroquois	633	23	35.6	— 4.1	70	9	14	19	40	0.26	— 2.20	0.10	0.2	4	9	11	10	n.	Jos. H. Peltier.
Mascoutah	St. Clair	425	20	42.0	— 2.5	75	9	19	17†	46	0.17	— 3.12	0.12	0.0	2	5	16	9	n. w.	Geo. Henrich.
Minonk	Woodford	745	17	36.2	— 3.5	70	9	16	22†	46	0.33	— 1.61	0.18	T.	3	10	14	6	n. w.	O. M. Davison.
Monmouth	Warren	784	18	35.3	— 3.8	65	7†	15	30	38	0.48	— 1.30	0.21	0.5	5	14	8	8	n. w.	Hugh R. Moffet.
Morrison	Whiteside	685	16	33.8	— 4.4	67	9	13	22	37	0.91	— 0.82	0.37	T.	7	12	11	7	n. w.	S. A. Maxwell.
Morrisonville	Christian	638	11	38.1	— 5.1	72	9	14	12	41	1.66	— 0.39	1.55	0.0	2	14	10	6	n. w.	J. D. Lowis.
Mount Vernon	Jefferson	511	16	42.2	— 3.5	74	9	19	17†	44	1.83	— 1.11	1.83	0.0	1	17	4	9	n.	Theo. P. Stelle.
Oregon	Ogle	702	1	33.0	.....	65	9	15	21	32	1.21	.....	1.20	T.	2	5	6	19	w.	Samuel Ray.
Ottawa	La Salle	500	24	35.4	— 3.8	65	9	17	22	36	0.74	— 1.63	0.52	T.	4	7	3	20	n. w.	Miss M. M. Harris.
Pana	Christian	692	24	39.2	— 2.8	70	9	17	12	38	1.96	— 1.69	1.82	0.0	2	14	2	14	nw.	C. W. Sibley.
Peoria	Peoria	609	33	35.3	— 2.2	68	9	15	12	36	0.79	— 1.85	0.63	T.	6	11	12	7	nw.	U. S. Weather Bureau.
Pontiac	Livingston	546	8	36.5	.....	70	9	18	12†	36	0.82	.....	0.38	T.	6	9	7	14	w.	Geo. Butterworth.
Riley	McHenry	956	51	31.8[a]	— 2.7	65	9	16	6	30[a]	1.27	— 0.69	0.72	0.2	7	5	7	18	nw.	John West James.
Rockford	Winnebago	763	18	32.0	— 4.9	63	9	12	30	34	1.44	— 0.97	0.84	1.0	8	15	2	13	.....	Hosmer C. Porter.
Rushville	Schuyler	670	19	37.8	— 2.7	73	10	16	12	42	0.59	— 1.49	0.51	T.	3	7	11	12	sw.	H. F. Dyson.
St. Charles	Kane	700	15	33.6	— 4.4	65	9	16	6	36	1.41	— 0.96	0.92	0.5	10	10	11	9	nw.	Dr. Wm. H. Bishop.
St. Peter	Fayette	.....	.....	39.1	.....	68	7	18	12†	40	0.45	.....	0.45	T.	1	14	9	7	nw.	M. L. Lansford.
Sparta	Randolph	538	24	42.2	— 2.8	73	7†	19	17†	38	1.19	— 2.31	1.16	0.0	2	17	9	4	nw.	Jas. A. Caldwell.
Springfield	Sangamon	644	33	38.0	— 2.7	71	9	19	30	34	1.57	— 1.09	1.45	T.	4	12	7	11	nw.	U. S. Weather Bureau.
Streator	La Salle	626	17	34.2	— 5.6	68	9	16	22	44[b]	0.43	— 1.84	0.14	T.	5	11	9	10	sw.	Edw. F. Sweetser.
Sullivan	Moultrie	530	10	38.8	— 4.2	73	9	16	12	40	3.48	+ 0.94	3.15	0.0	3	12	13	5	nw.	C. A. Corbin.
Sycamore	De Kalb	855	30	32.6	— 3.5	65	9	16	6	36	1.10	— 1.27	0.50	T.	3	13	6	11	nw.	Miss E. J. Davis.
Tiskilwa	Bureau	798	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. I. Smucker.
Walnut	....do	717	19	34.7	— 4.2	67	9	17	30	31	0.60	— 1.23	0.33	T.	7	11	12	7	nw.	O. C. Nussle.
White Hall	Greene	573	2	37.4	.....	74	9	13	17	43	0.69	.....	0.50	T.	4	12	9	9	nw.	Dr. R. A. Pritchett.
Windsor	Shelby	681	11	39.2	— 2.7	73	9	16	17	40	4.65	+ 1.64	4.30	0.0	5	6	12	12	nw.	Herbert Rose.
Winnebago	Winnebago	900	23	32.1	— 4.1	66	9	15	6†	36	1.90	— 1.19	0.93	3.0	7	13	9	8	nw.	Frank Osborn.
Yorkville	Kendall	584	23	33.0	— 3.3	65	9	17	13†	36	1.05	— 1.34	0.70	T.	8	10	5	15	w.	Herman A. Grimwood.
Zion	Carroll	938	16	31.5	— 5.1	63	9	13	22	32	0.75	— 1.01	0.40	4.0	2	18	3	9	w.	Robt. F. Gillogly.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 5, upper Mississippi Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
North Dakota.																														
Amenia	Red									.05									T.	.25											0.30
Bottineau	Mouse	.05	T.							.02				.03				T.	T.		.23		T.								0.69
Cando	Sheyenne																.30			.20							.48				0.98
Crosby	Mouse	.02			T.					T.	T.	T.	T.	T.	T.					.15	.13					T.	.54	.08	T.		0.92
Devils Lake	Sheyenne	.05		T.	T.	T.			.11			T.	T.		T.			T.		.24	.06	T.	T			.07	.02				0.55
Donnybrook	Mouse																														
Dunseith	do			T.	T.	T.							T.							.20	.10						.20				0.50
Edmore	Sheyenne	T.			T.					.05			T.								T.	T.				T.	T.				0.05
Forman	do	T.	T.																		.30										0.20
Grafton	Red																														
Granville	Mouse	T.								.02			.01							.30		T.				.19					0.52
Hannah	Pembina																														
Hansboro	Red	T.										T.		T.						*	.23		.10				.46				0.79
Hillsboro	do	.02							.26					.01						.30	.03										0.62
Lakota	Sheyenne	.05			T.					.03				T.	T.			T.		.16	.12	T.	.03			T.					0.39
Langdon	Pembina																														
Larimore	Red									.15											.75										0.90
Lisbon	Sheyenne		T.							.25					T.				T.		T.	.10	T.								0.35
McKinney	Mouse	.10							T.		T.			T.						.40						1.00					1.50
Manfred	Sheyenne	T.							.10				T.	T.						.20	.10					T.					0.40
Mayville	Red																														
Minot	Mouse		T.							.12			T.	T.							.40		T.				.30	.05			0.87
Minto	Red	T.							.18											.08		T.	T.				.08				0.34
Oreska	Sheyenne	T.							.02		T.									.05	.10	.13									0.30
Park River	Red													.09						.05	.06		.10				.03				0.33
Pembina	do									.10											.05	.20									0.35
Power	Sheyenne											T.	T.	T.							.02										0.02
Pratt	Mouse																		.60												0.60
Towner	do								T.											.10	.20										0.30
University	Red	T.	T.							.17										*	.65							.06	T.	T.	T.	0.87
Wahpeton	do	T.							T.	‡				.02						T.	T.										0.02
Wolhalla	Pembina																														
Westhope	Mouse																														
Willow City	do	T.							T.				T.							.20			T.					.10			0.30
Minnesota.																															
Albert Lea	Mississippi	.25			.15										T.						T.		T.								0.40
Alexandria	do	T.	T.	T.	.10					.06					.20						T.	.02	T.								0.38
Angus	Red	T.								T.	T.			.05	.05					.35											0.45
Bagley	do		T.		.15									.30					.23	.15		.04									0.87
Baudette	Rainy																														
Beardsley	Minnesota	.30												.03							.04		T.								0.37
Beaulieu	Red																														
Bird Island	Minnesota	T.	T.		T.							T.			.04						T.		.31								0.35
Caledonia	Mississippi	.43													T.							T.					.01				0.44
Campbell	Red																														
Cass Lake	Mississippi				.15					T.	T.				.75						.15					.25					1.30
Collegeville	do	.13													.08						.02										0.23
Crookston	Red		T.							T.					.10						.35		T.								0.45
Detroit	do		T.	T.	.03	T.				T.	.26	T.	T.	.20	T.	T.		T.			.16	T.	T.				T.				0.65
Fairmont (near)	Minnesota	.10			.12									.06							.05										0.33
Faribault	Mississippi	.14			.19										.19						.01		.04								0.57
Farmington	do	.20	T.	T.	.11										.11						.02		.06				T.				0.50
Fergus Falls	Red	.04	T.		.01					.06		.01		.10	.07	.01				.03	.02		T.			.01				T.	0.36
Fort Ripley	Mississippi	T.	T.	T.	.01					T.	T.	T.			.10					T.		T.									0.11
Fosston	Red									.22	.05				.28						.15						.04				0.74
Fram	do								.02						.20							.10	.10								0.42
Glencoe	Mississippi	T.													.05						T.	T.	.15								0.20
Grand Meadow	do	.18	.03		.16										.07		T.				T.		T.				T.			T.	0.44
Hallock	Red									T.				.10						.05	.05		.12				.10				0.42
Halstad	do		T.							T.					T.						.40										0.40
Hinckley	St. Croix			.37											.75								T.								1.12
International Falls	Rainy		T.		.30	.05			T.	T.	T.			.20	.20						.30	T.	.40				T.	T.	T.		1.45
Kelliher	Red		T.		.10	T.				.01	T.				.26						.10	T.	.05					T.		T.	0.52
Lake Crystal	Minnesota	.10			T.										.05						T.		.08								0.23
Leech Lake Dam	Mississippi		T.		.12					.20					.17					.01	.13	T.	.03	.23				T.			0.89
Little Fork	Rainy				.10	T.									.21						.48		.50								1.29
Long Prairie	Mississippi														.15						T.	T.									0.15
Lynd (2)	Minnesota	.08	T.												T.	T.							.32								0.40
Mankato	do	.17			.13	.06									T.						T.	T.		T.							0.36
Maplepiain	Mississippi	.05	.01		.02					T.	T.			.05	.20						.07		.12	.03			T.			T.	0.55
Milaca	do	.19			.14					T.											.09		T.								0.42
Milan	Minnesota	.27	T.											.10	.10								.15								0.62
Minneapolis	Mississippi	.12	.02		.16					T.		T.		.06	.09						.07		.04	.03			T.				0.59
Montevideo	Minnesota		.08									T.				.06				T.		.01	T.	.19							0.34
Mooshead	Red									.26		T.		.01		T.				.20	.02		T.								0.49
Mora	St. Croix	.15			.16					.01					.09						.08	.05	.02	.02			.01				0.59
Morris	Minnesota	T.			.05					.04				.08							.03		T.								0.20
New London	Mississippi	.02												T.	.15								.05								0.22
New Richland	Minnesota	.06	T.		.40										T.						T.		T.				T.				0.46
New Ulm	do	.05	T.												.10						.03	.02	T.	.10							0.30
Osakis	Mississippi		T.		T.										.18						T.		.04	T.							0.22
Park Rapids	do		.01		.08					.28		T.			.20						.14	.02	.01	.06							0.80
Pine River Dam	do		T.	T.											.05						T.	T.		T.							0.05
Pokegama Falls	do	T.			.14					.06					.16						.15			.38						T.	0.89
Red Lake	Red				.34	T.				.08					.36					.20	.06	.02									1.08
Red Wing	Mississippi	.10	.18		.04	.26									.12	.02						.02	T.	.06	T.						0.80
Redwood Falls	Minnesota	.05	.05		T.										.10								.38								0.58
Reeds Landing	Mississippi	.02	.28			.08									.04	T.						.02	T.								0.44
Rochester	do	T.	.20		T.										T.												T.				0.20
Roseau	Red		T.		.03	.02			T.	.07					.28						.10		.13				.03	.04			0.70
St. Charles	Mississippi	T.	.21			.07									.06								T.					T.			0.34
St. Cloud	do	T.			T.				T.						.20						.05		T.	.06							0.31
St. Paul	do	.14	T.		.14					T.				.04	.08		T.				.03	T.	.03	.02				T.			0.48
St. Peter	Minnesota				.06									.03									T.					T.			0.09
Sandy Lake Dam	Mississippi				.09					.03					.03									.19								0.34
State Sanatorium	do		T.		.08					.17					.08						.26		.09	.09								0.77
Stillwater	St. Croix	.01	.01		.02										.16						.03	T.	.14									0.37
Taylors Falls	do		T.		.21										.08								T.									0.29
Warroad	Rainy		T.		.23	T.			.03					.22							.14					.16					0.78
West Concord	Mississippi	.20													.10								T.									0.30
Willow River	St. Croix																														
Windom	Des Moines	.11										T.			T.					T.		T.							T.		0.11
Winnebago	Minnesota	.10	.09		T.	T.							T.		T.			T.		T.	T.	T.	T.				T.					0.19
Winnibigoshish	Mississippi				.09					.21	T.				.19						.13		.08	.35			.02	T.				1.07

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Minnesota—Continued.																															
Winona	Mississippi	.33	.03		.01					T.					.05		T.				T.	.02						T.			T.	0.44
Worthington ‖	Des Moines	.06	T.		T.										T.						.02											0.08
Zumbrota	Mississippi	.13			.02										T.	T.							T.					T.				0.15
South Dakota.																															
Milbank ‖	Minnesota	.07	T.												.18								T.	.03								0.28
Wisconsin.																															
Antigo	Wisconsin	.10	T.		.05	T.			T.						.15						.05	T.	.05	.02	T.			T.			.02	0.44
Barron	Chippewa	.10	.05		.25	.50									.30						.10		.10									1.40
Beloit	Rock	.10	T.		.30																.40				.25			.95			T.	2.00
Big St. Germain Dam	Wisconsin	T.	T.		.42	T.	T.		T.	T.	T.	.50	.20		.26	T.		T.			T.	T.	T.	.11				.14	T.	T.	.08	1.71
Brodhead	Rock	.26	.05	.01						T.					T.							T.		.15	.07			1.05			T.	1.59
Burnett	do	*	.39		T.	.13					T.				.16						T.	.04		.02	.03			1.50	T.		T.	2.27
Darlington	do																														
Deerskin Dam	Wisconsin	.30	T.		T.	T.		T.	T.	T.	T.	.07			.20						T.		T.	.16				T.		.09	.03	0.85
Delavan	Rock	.19	T.		.72						T.				T.						.08	T.		.08	.11		.44	.31			.03	1.96
Dodgeville ‖	do									.20					T.							.05						.92	.21			1.38
Downing	Chippewa	.10	T.		.40										.20	.05					T.		T.	T.				T.			T.	0.75
Eau Claire	do	.24	.14		.07										.15						T.	.04	.05	T.				T.				0.69
Grand Rapids ‖	Wisconsin	T.	.11	.02		T.				T.					.13	.04						.09		T.	.06	T.		T.	.01			0.46
Grantsburg	St. Croix	.02			.30										.20						T.	.20	T.									0.72
Hancock	Wisconsin	.20	T.		T.										.20							.10		.10				.50			T.	1.10
Hatfield	Black	.50	.21							T.				.30							.15	.10						.10				1.36
Hayward	St. Croix		T.		.20					T.					.30						T.		T.									0.50
Hillsboro	Wisconsin	.35	T.		T.					T.		T.			.20				T.		.05	T.				T.		.20			T.	0.80
Koepenick	do	.40			.40	T.	.10		T.						.20						.10	T.	.10	.10	.10			.30		T.	.30	2.10
Lac du Flambeau	Chippewa	T.			.02		T.							.40									.05									
La Crosse	Mississippi	.36	.01		T.					T.		T.			.02	T.	T.		T.		.06	T.	T.					.01			T.	0.46
Lake Mills	Rock	.38	.01		.01	.08					T.				.06							.06		.04	.07			.68	T.		T.	1.39
Lancaster	Mississippi	.10			.10						.03										.03							.88				1.14
Long Lake	Wisconsin	.52	T.	.01	.06	T.						.03	.04		.14						.03	.04	.02	.09				.05	.02	T.	.05	1.10
Madison	Rock	.27	.04		.23	T.				T.					.01	T.	T.	T.	T.		.04	T.		.06	.05		.18	.70		T.	.01	1.59
Mather ‖	Wisconsin																														
Mauston	do	*	.50												.15						T.							.55				1.20
Meadow Valley	do	.38	.07		T.										.14						.03											0.62
Medford	Black	.10		.20	T.										.15						.05	.10										0.60
Merrill	Wisconsin																														
Minocqua	do	.32			.08	T.			T.		T.	.03	T.		.15								.20					.15	T.	T.	.05	0.98
Mondovi	Mississippi	.27	.07		.10										.12						T.	T.	.01					T.				0.57
Mount Horeb	Rock	.25	.05	T.	T.										.08		T.				.10			.06	.11			.60		.10	T.	1.35
Muscoda ‖	Wisconsin		.30	T.		.26					T.				.04	T.						T.	T.		.12			.80				1.52
Neillsville	Black	.35	.15											.25								.10		.07				.05				0.90
New Richmond	St. Croix	.02			.30					T.				T.	.50						.30		.07									1.19
Osceola ‖	do	T.			.30										.04						.03		T.	T.								0.37
Park Falls	Chippewa	T.	T.		.20	.10				T.	T.				.05				T.		T.	.04	T.	T.								0.39
Portage	Wisconsin		.40																						T.			T.	1.15			1.55
Prairie du Chien ‖	Mississippi		.26	T.		.04					T.											T.			T.			16				0.46
Prentice	Chippewa	.41	.12		.18	.11									.42						.12	T.	.07	.11	T.			T.			T.	1.54
Rhinelander	Wisconsin	.13	T.		.07	T.						.06			.19						.07	.08	.03	.10				.05			.34	1.11
Sauk City	do																														
Shullsburg	Mississippi	.34				.20																.03			.05			.14				0.76
Solon Springs	St. Croix																														
Spooner	do				.15										.24						T.	T.	T.									0.39
Stanley	Chippewa	T.	.26		.04	T.									.15							.07	.03		T.							0.55
Stevens Point	Wisconsin	.62			T.										.05						.10							T.			.05	0.82
Sugar Camp Dam	do	.02	T.		.04	.05	.02	T.		T.		.04	.01	.15	.14	.10					.10	.04	.10	.04				.04	T.	T.	.04	0.93
Twin Lakes Dam	do	.15			.30	T.	.05			T.	T.	.13			.14						T.		T.	.15				T.		T.	.18	1.10
Valley Junction	do	.13	.25		.08				T.						.31		T.				.13	.09		.07	T.			.29			T.	1.35
Viroqua	Mississippi	.22	T.		.06	T.				T.	T.				.01						.05		T.		T.			.10			T.	0.44
Vudesare	Wisconsin	.25	.05		.08	T.	T.	T.	T.	T.	.05	.17	T.		.10	T.					T.	T.	T.	.15				T.	T.	.04	T.	0.89
Watertown ‖	Rock		.22			.10					.21				.05					T.		.18	.05	.12	.09	.09		1.42	.62			3.15
Waukesha	Fox	.35				.18									.12						.14	.05		.15	.18			1.70			T.	2.87
Wausau	Wisconsin	.27	.13		.12	T.				T.		T.			.12						.10	.07	.35	T.	.24			.01			T.	1.41
Weyerhaeuser	Chippewa	.20	.10	.10	.20										.16					.04		.05	.16	T.				.02				1.03
Whitehall	Mississippi	T.	T.		T.										.30						T.	T.					T.				T.	0.30
Iowa.																															
Albia ‖	Des Moines					.05					T.											.47										0.52
Algona	do	.17			.12																T.											0.29
Alta ‖	Raccoon	.03	.02		.08	.07										T.					.03											0.23
Amana	Iowa	.02			.34					.08											.03				.06			.06				0.59
Ames	Skunk	T.			.12																						T.		T.			0.12
Baxter	do	T.			.45						.10										.05				.08							0.68
Belle Plaine	Iowa	.05			.42					.10															.10			T.				0.67
Belmond	do	.16			.06					T.					T.	T.	T.		T.		.11						T.				T.	0.33
Bloomfield	Mississippi																														
Bonaparte	Des Moines				.23																.30				T.							0.53
Boone ‖	do					.38					T.										T.				T.							0.38
Britt	Iowa	.09			.06																T.											0.15
Buckingham	Cedar	.10			.17					.07											T.				.05							0.39
Burlington ‖	Mississippi					.05																.50			.12			.30				0.97
Carroll ‖	Raccoon				T.																										T.	
Cedar Rapids ‖	Cedar		.12			.28					.09								T.			T.			T.			T.	T.			0.49
Charles City	do	.19			.10																											0.29
Clear Lake	do	.20																														0.20
Clinton	Mississippi	.06			.11					.11											.10			.05	.10		T.	.05				0.58
Columbus Junction	Iowa				.20	.05															.12				.06			T.				0.43
Davenport	Mississippi	T.	T.		.06					T.							T.				.07		T.	T.	.05		T.	.04				0.22
Decorah	do	.24			.02																							T.			T.	0.26
Delaware	do	.10			.23						.05										.03				.05			.19				0.65
Des Moines	Des Moines	.01			.42					.05							T.	T.			.04				.01		T.	T.				0.53
De Soto	Raccoon	T.			.56	T.				T.	T.										T.											0.56
Dubuque	Mississippi	.12	T.		.07	T.				.04					T.						.05				.03		.02	.20				0.53
Earlham	Raccoon	T.			.44						.08										T.											0.52
Elkader	Mississippi	.24			.15					T.					T.						T.							.27				0.66
Elma	Wapsipinicon	.10			.09							T.	.03				T.				T.							T.			T.	0.22
Estherville ‖	Des Moines	.08	T.		.02											T.																0.10
Fairfield	Skunk				.22	.01					.03										.20				.02		T.	T.				0.48
Fayette	Mississippi	.18	T.		.10					T.					T.																	0.28
Forest City	Cedar				T.																T.											T.
Fort Dodge	Des Moines	T.	T.			.16																						T.				0.16
Fort Madison	Mississippi				.30																.28						.12					0.70
Gilman	Iowa																															
Grand Meadow	Mississippi	.06			.12					.06											.05							.06				0.35

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Iowa—Continued.																																
Greene	Cedar	.06			.11																T.											0.17
Grinnell	Iowa	.04			.20	.45				.13											.08				.08							0.98
Grundy Center	Cedar									.05															.02		T.					0.07
Guthrie Center	Raccoon	T.			.24					T.	.06				T.				T.		.04				.01							0.35
Hampton	Cedar	.13			.18																											0.31
Humboldt	Des Moines	.13			.10																.06											0.29
Independence	Wapsipinicon	T.			.05																											0.05
Indianola	Des Moines				.35					.04											.06								T.			0.47
Iowa City ‖	Iowa		.03			.20					.10										.03	.10			.11			.15				0.69
Iowa Falls ‖	...do	T.	.08	T.		.20					.10					T.		T.		T.	.03							T.				0.31
Jefferson	Raccoon				.05																											0.05
Keokuk	Mississippi				.03																.19				T.			.01				0.23
Keosauqua ‖	Des Moines					.25					.04				T.						.23	.27			T.	T.		.04				0.60
Knoxville	...do				.40																T.				T.							0.63
Lacona	...do				.56						.10										.15											0.81
Le Claire ‖	Mississippi		.02			.07					.01							T.				.10	T.	.02	.11	.02		.01	.00			0.48
Marshalltown ‖	Iowa		.12			.28					.12											.06			.07			.05				0.70
Mason City	Cedar	.15			.10									T.	T.																	0.25
Mount Pleasant	Skunk				.20	.06					.03				T.		T.				.23				.05			.02				0.59
Muscatine ‖	Mississippi		T.			.20					.02											.10			.08	.02		T.				0.42
New Hampton	Wapsipinicon	.10			.12																T.											0.22
Newton	Skunk				.19																				.17							0.36
Northwood	Cedar	.20			.10										T.						.03										T.	0.33
Olin	Wapsipinicon																															
Osage	Cedar	.17			.12																											0.29
Oskaloosa	Des Moines	T.			.09					.15											.15				.04							0.48
Ottumwa	...do				T.					T.	T.										.18			T.								0.18
Pella	...do	.02			.38	.02										T.	T.		T.		.05				.02							0.49
Perry	Raccoon				.32																											0.32
Plover	Des Moines				.20										T.																	0.20
Pocahontas	...do	.05			.04																.02											0.11
Ridgeway	Mississippi	.54	T.		.05					T.					.01		T.		T.	T.	.01		T.	.01				.01				0.63
Rockwell City	Raccoon		T.							.20																						0.20
Sac City	...do																				T.											T.
St. Charles	Des Moines	T.			.40	.02					.08										.10											0.60
Sigourney	Skunk				.04	.25					.10										.08							.05				0.52
Stockport	...do				.08	.16					T.										.26				.02			.02				0.54
Storm Lake	Raccoon																															
Stuart	...do				T.						T.										.09				.14			.12				T.
Tipton	Cedar				.35					.07											T.				.20							0.77
Toledo	Iowa	.05			.25						T.										.16				.05							0.50
Wapello	...do			T.	.12						T.										.12				.05							0.38
Washington	Skunk					.23				.01					T.							.08						.05					0.41
Waterloo ‖	Cedar		.17			.11					.03				T.				T.		T.				.01			.05				0.44
Waukee	Raccoon	.01	T.		.52					.01					T.																	0.55
Waverly	Cedar	.13								T.															T.							0.13
Webster City	Des Moines	T.	T.		.17					T.											T.											0.17
West Bend	Des Moines	.06	T.		.12							T.								.01												0.19
Whitten	Iowa	T.			T.					T.					T.						T.											T.
Winterset	Des Moines				.26						T.										T.											0.26
Missouri.																																
Gorin	Mississippi				.11																.30											0.41
Hannibal	...do		T.		.02															T.	.07	T.					.04	T.				0.13
Louisiana	...do		T.		.07						T.										.20	.10						.70				1.07
Mexico ‖	...do			T.		T.																.13						.07	.02			0.22
Steffenville	...do				.50	.05														T.	.30		T.									0.85
Sublett	...do					T.															T.						T.					T.
Warrenton ‖	...do					.02																.12							.20	.45			0.79
Indiana.																																
Collegeville	Iroquois	.10	.12			.20					.12				T.									T.	.10			.40	.15		T.	1.19
Knox	Kankakee	.04	.02	.11		.12					.27	T.			.02	T.						T.		.02	.12			.20	.32		.08	1.32
Laporte	...do	.10	.02	.17		.08					.07	T.			.10	.05								T.	.10			.25	.35		.21	1.50
Plymouth	...do	.03	.05			.02					.23	T.			.02	T.	T.		T.			.02		.02	.12			.35	.27	T.	.08	1.21
Illinois.																																
Aledo	Mississippi	T.			.02	.16												T.			.14				.08			.02				0.42
Alexander	Illinois				.08										T.					T.	.05	.03			T.		T.	.98				1.14
Antioch	...do																											1.35			T.	2.00
Astoria	...do		T.		T.	.20									T.		T.	T.			.12				T.			1.20				1.67
Aurora	...do	.02	.02			T.								T.							T.	.05	.03	.12	T.			1.70				1.44
Bement	Mississippi					.19																			.02							1.91
Benton	...do																															
Bloomington	Illinois	T.	T.	T.							T.										.05				T.			.59				0.64
Cairo	Mississippi	T.			.11										T.									.07			.01	.36				0.55
Carbondale	...do	.03			.09	.07																						.06				0.25
Carlinville	Illinois					.05																						.39				0.44
Carlyle	Mississippi																											.22				0.22
Chester	...do				.13	.01																						.12	.02			0.28
Clinton	Illinois	T.				.15															T.	.01		T.	.03			1.70				1.89
Coatsburg	Mississippi				T.															T.	.05							T.				0.05
Cobden	...do	.05			.16																							.05				0.26
Dakota	...do	.16	T.			.20											T.	T.				.07		.11	.08			.75			T.	1.37
Decatur ‖	Illinois	T.			T.	.13															T.	T.		T.	.04			2.67				2.84
Dixon ‖	Mississippi		.10			.07																.08		.03	.05			.43	.09			0.85
Du Quoin	...do	.14			.03																							.14				0.31
Dwight	Illinois	.06				.03					.02				T.							.05		T.	.04			.06			T.	0.26
East St. Louis ‖	Mississippi																					.02						.07	.16			0.25
Edwardsville	...do																											.12				0.12
Elgin	Illinois	.06	T.		.05																.04				.10			.90			T.	1.15
Galva ‖	...do		T.			.12																.10			.06	T.		.03	.01			0.32
Grafton ‖	Mississippi																					.04						.64				0.68
Greenville	...do	T.																			.02							.30				0.32
Griggsville	Illinois					T.															.12							1.24	T.			1.36
Halfway	Mississippi	.18	T.			.11																T.		T.				.11				0.40
Havana	Illinois				.21																.12						.86					1.19
Henry	...do	T.				.05					.02										T.	.04			.09			.34				0.54
Hillsboro	Mississippi						T.																					1.05				1.05
Joliet	Illinois	.09	T.		.05					.07					T.		T.	T.	T.		.05			T.	.14		.05	.14			.03	0.62
Kishwaukee	Mississippi	.10	T.			.21									T.						.15			.04	.09			.55			T.	1.14
La Grange	Illinois	.12	T.																			.12		T.	.28			1.12			.09	1.73
La Harpe	...do				T.	.11															T.				T.		T.	T.				0.11
Lanark	Mississippi	.15	T.		T.	.15					.02				T.	T.			T.		T.	.01		.05	.08			.25			T.	0.71
La Salle	Illinois	.03	T.		.04					.02	.03				T.		T.	T.			.04			T.	.04		.31	.26			T.	0.77
Lincoln	...do	T.				.22															T.	.08		T.	T.			.82				1.12
Loami	...do				T.	.19									T.						T.	.08			T.		T.	1.38				1.65

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Illinois—Continued.																															
Martinton ‖	Illinois	.03			.10					T.											T.						T.	.10			.03	0.26
Mascoutah	Mississippi																				T.						.05	.12				0.17
Minonk	Illinois	.05				T.															T.			T.	.10		T.	.18			T.	0.33
Monmouth	Mississippi	T.			.04	.17															.15				.01		.04					0.48
Morrison	....do	.02				.10					T.										.03	.15		.13	.18			.37				0.91
Morrisonville	Illinois	T.				.11																		T.				1.55	T.			1.66
Mount Vernon ‖	Mississippi																							T.					1.83			1.83
Oregon	....do	.01				T.															T.			T.	T.			1.20			T.	1.21
Ottawa	Illinois										.13											.02			.07			.52			T.	0.74
Pana	Mississippi					.14					T.											T.						1.82				1.96
Peoria	Illinois	T.	T.		.06	.01				T.	T.						T.		T.		.05			T.	.04		.01	.62				0.79
Pontiac	....do	.10				.10					.04											.06		T.	.14			.38				0.82
Riley	Mississippi	.09	T.		.19										T.			T.			.05			.17			.72	.03			.02	1.27
Rockford ‖	....do		.10	T.		.16					.02						T.					.12		.07	.13			.26	.58			1.44
Rushville	Illinois				T.										T.						.05						.51	.03				0.59
St. Charles	....do	.12	.02			.06					.03				T.				T.		T.	.07		.03	.11			.92	.03		.02	1.41
St. Peter	Mississippi	T.			T.						T.										T.	T.						.45				0.45
Sparta	....do	T.			.03																						T.	1.16				1.19
Springfield	Illinois				.09										T.		T.	T.		T.	.03	T.			T.		.88	.57				1.57
Streator ‖	....do					.06					T.											.07		T.			.08	.14	.08			0.43
Sullivan	Mississippi	T.				.23					.10														T.			3.15				3.48
Sycamore ‖	....do			T.		.20									T.							T.		T.	T.			.40	.50			1.10
Tiskilwa	Illinois																															
Walnut	Mississippi	.03				.02					.04										.10	T.		T.	.08			.33				0.60
Warsaw ‖	....do																				.27											0.27
White Hall	Illinois				.08	.01														T.	.10	T.						.50				0.69
Windsor	Mississippi	.04				.19					.10											.02						4.30				4.65
Winnebago	....do	.17	T.			.30				.05					T.						T.	.20		.10	.15			.93			T.	1.90
Yorkville	Illinois	.10	T.	T.		.02					.10				T.	T.	T.	T.			T.	.02		.01	.05			.70	.05		T.	1.05
Zion	Mississippi	T.				.40																						.35				0.75

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 5, upper Mississippi Valley.*

Date.	North Dakota.												Minnesota.											
	Bottineau.‡‡		Devils Lake.		Lisbon.‡‡		Minot.‡‡		Pembina.‡‡		Crookston.‡‡		Collegeville.		Grand Meadow.		Montevideo.‡‡		Moorhead.		New Ulm.‡‡		Pine River Dam.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	31	15	22	15	22	8	27	15	30	17	36	18	44	30	47	25	46	22	43	17	46	26	43	16
2	32	15	24	15	24	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
3	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
4	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
5	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
6	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
7	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
8	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
9	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
10	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
11	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
12	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
13	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
14	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
15	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
16	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
17	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
18	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
19	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
20	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
21	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
22	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
23	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
24	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
25	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
26	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
27	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
28	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
29	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
30	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16
Mns.	32	15	25	12	25	8	28	15	32	18	36	19	45	32	47	26	46	23	43	17	46	26	43	16

Date.	Minnesota.								Iowa.															
	St. Paul.		Winnibigoshish.		Delevan.		Eau Claire.		La Crosse.		Madison.		Mauston.		Spooner.		Wausau.		Algona.		Cedar Rapids.‡‡		Charles City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
2	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
3	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
4	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
5	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
6	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
7	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
8	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
9	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
10	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
11	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
12	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
13	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
14	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
15	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
16	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
17	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
18	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
19	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
20	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
21	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
22	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
23	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
24	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
25	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
26	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
27	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
28	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
29	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
30	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34
Mns.	43	22	43	22	55	32	55	32	44	26	47	34	53	34	63	36	57	34	57	32	55	32	54	34

Date.	Iowa.																							
	Davenport.		Des Moines.		Dubuque.		Keokuk.																	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.																
1	57	36	60	36	61	36	62	36																
2	57	36	60	36	61	36	62	36																
3	57	36	60	36	61	36	62	36																
4	57	36	60	36	61	36	62	36																
5	57	36	60	36	61	36	62	36																
6	57	36	60	36	61	36	62	36																
7	57	36	60	36	61	36	62	36																
8	57	36	60	36	61	36	62	36																
9	57	36	60	36	61	36	62	36																
10	57	36	60	36	61	36	62	36																
11	57	36	60	36	61	36	62	36																
12	57	36	60	36	61	36	62	36																
13	57	36	60	36	61	36	62	36																
14	57	36	60	36	61	36	62	36																
15	57	36	60	36	61	36	62	36																
16	57	36	60	36	61	36	62	36																
17	57	36	60	36	61	36	62	36																
18	57	36	60	36	61	36	62	36																
19	57	36	60	36	61	36	62	36																
20	57	36	60	36	61	36	62	36																
21	57	36	60	36	61	36	62	36																
22	57	36	60	36	61	36	62	36																
23	57	36	60	36	61	36	62	36																
24	57	36	60	36	61	36	62	36																
25	57	36	60	36	61	36	62	36																
26	57	36	60	36	61	36	62	36																
27	57	36	60	36	61	36	62	36																
28	57	36	60	36	61	36	62	36																
29	57	36	60	36	61	36	62	36																
30	57	36	60	36	61	36	62	36																
Mns.	57	36	60	36	61	36	62	36																

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 5*—Continued.

Date.	Illinois.																					
	Hannibal, Mo.		Laporte, Ind.		Cairo.		Greenville.		La Salle.		Monmouth.		Mt. Vernon.§§		Peoria.		Springfield.		Winnebago.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	66	34	56	43	65	45	64	36	62	35	63	34	68	37	63	35	63	34	62	34
2	44	35	50	27	61	37	64	36	64	36	64	35	64	36	64	36	64	36	64	35
3	66	36	66	31	44	33	66	33	66	36	66	36	66	36	66	36	66	36	66	36
4	66	36	66	34	65	36	66	36	66	36	66	36	66	36	66	36	66	36	66	36
5	44	32	41	34	45	36	44	32	44	32	44	32	44	32	44	32	44	32	44	32
6	56	25	47	36	62	31	62	35	62	35	62	35	62	35	62	35	62	35	62	35
7	59	26	44	24	67	38	67	36	67	36	67	36	67	36	67	36	67	36	67	36
8	60	33	42	22	69	43	69	43	69	43	69	43	69	43	69	43	69	43	69	43
9	71	41	49	36	70	46	70	46	70	46	70	46	70	46	70	46	70	46	70	46
10	46	21	34	34	62	42	62	42	62	42	62	42	62	42	62	42	62	42	62	42
11	46	24	37	26	60	35	60	35	60	35	60	35	60	35	60	35	60	35	60	35
12	63	35	36	31	47	34	47	34	47	34	47	34	47	34	47	34	47	34	47	34
13	56	32	32	30	66	36	66	36	66	36	66	36	66	36	66	36	66	36	66	36
14	45	22	25	22	74	44	74	44	74	44	74	44	74	44	74	44	74	44	74	44
15	46	22	25	22	64	46	64	46	64	46	64	46	64	46	64	46	64	46	64	46
16	30	19	32	27	43	32	43	32	43	32	43	32	43	32	43	32	43	32	43	32
17	41	16	36	23	50	36	50	36	50	36	50	36	50	36	50	36	50	36	50	36
18	49	24	34	24	54	34	54	34	54	34	54	34	54	34	54	34	54	34	54	34
19	41	15	46	25	58	31	58	31	58	31	58	31	58	31	58	31	58	31	58	31
20	44	36	45	36	62	42	62	42	62	42	62	42	62	42	62	42	62	42	62	42
21	46	22	46	22	68	42	68	42	68	42	68	42	68	42	68	42	68	42	68	42
22	57	36	42	32	69	44	69	44	69	44	69	44	69	44	69	44	69	44	69	44
23	62	41	46	32	72	46	72	46	72	46	72	46	72	46	72	46	72	46	72	46
24	57	29	46	32	62	44	62	44	62	44	62	44	62	44	62	44	62	44	62	44
25	48	28	45	32	58	44	58	44	58	44	58	44	58	44	58	44	58	44	58	44
26	55	38	43	27	64	47	64	47	64	47	64	47	64	47	64	47	64	47	64	47
27	60	33	45	34	74	46	74	46	74	46	74	46	74	46	74	46	74	46	74	46
28	55	22	34	22	66	34	66	34	66	34	66	34	66	34	66	34	66	34	66	34
29	55	15	34	25	66	34	66	34	66	34	66	34	66	34	66	34	66	34	66	34
30	31	15	38	25	52	27	52	27	52	27	52	27	52	27	52	27	52	27	52	27
Means	48.3	27.7	42.8	28.3	54.4	35.9	49.6	29.7	42.4	26.6	44.5	26.1	54.7	29.6	44.7	25.8	46.8	29.1	40.2	24.0

Climatological Data for November, 1910.

DISTRICT No. 6, MISSOURI VALLEY.

MONTROSE W. HAYES, District Editor.

GENERAL SUMMARY.

November passed without the occurrence of any storms of severity, or any temperatures that were unusual. The storm that displayed the greatest amount of energy affected only the lower portion of the district. It appeared over Oklahoma and southern Kansas on the 26th, moved in an east-northeasterly direction, and its center was over Indiana on the afternoon of the 27th. In its easterly passage it caused brisk wind, warm weather, and light to moderate rains in eastern Kansas, Missouri, and southern Iowa. On the 30th an area of high atmospheric pressure, of more intensity and accompanied by colder weather than any other of the month, was appearing over eastern Montana and North Dakota, where it gave temperatures several degrees below zero. In the lower third of the district there was considerably more than the normal number of clear days, and the precipitation was very light. In the upper two-thirds, or the western and northwestern portions, the sunshine was deficient, but generally the precipitation did not equal or exceed the normal, as might be inferred; the only regions where there were more rainy days and a greater amount of moisture than in the average November were western and southern Montana, northern Wyoming, and southwestern South Dakota. The mean temperature for the month was high along the Rocky Mountain slope. Over the prairie country and as far east as the Missouri River it was quite normal, and to the east of the Missouri River it was, as a rule, lower than it is ordinarily.

TEMPERATURE.

The temperature was very uniform. The first half of the month was quite mild, and at most stations the maximum temperature for the month occurred during the first 10 days. The 25th and 26th were comparatively warm in the southern and eastern portions of the district, and at a few points temperatures that were the highest of the month were recorded. In North Dakota the maximum for the month was 68°; in Colorado, Nebraska, Kansas, and Missouri there were thermometer readings in excess of 80° on the 8th, 9th, and 25th, the highest being 84° at Wallace, Kans., on the 25th. In the remainder of the district the maximum temperatures for the month were all lower than 80°. In Montana, Wyoming, and North Dakota there were some readings that were considerably below zero, the lowest being −29° at Bowen, Mont., on the 27th. These extreme temperatures, however, were exceptions, and prevailed only at stations where topographical conditions are favorable for the occurrence of very low temperatures. The coldest weather occurred during the latter half of the month, and mostly during the last 10 days.

PRECIPITATION.

There were no well-marked periods of rainy or snowy weather. Below the 3,000-foot contour, the general direction of which is from western Kansas northward, there was a marked deficiency in the precipitation. This deficiency was greatest in extreme eastern Kansas and Missouri. In this region having an elevation of less than 3,000 feet, and in Colorado, practically all of the precipitation occurred during the latter half of the month. In the remainder of the drainage area the days with rain or snow were well distributed through the month, but at no time was there a heavy fall of either rain or snow (except at some of the mountain stations where comparatively heavy snowstorms occurred), and only in western and southern Montana, northern Wyoming, and southwestern South Dakota was the total precipitation for the month above the seasonal average. Some snow occurred in all parts of the drainage area, but was mostly light except in the higher mountains.

Mountain snowfall.—During the latter half of the month the precipitation in Montana was almost all in the form of snow, which was heavy in most mountain sections. The average was about 10 inches; this is the greatest November average since 1903. In the higher mountains the fall was 25 to 35 inches, and as little thawing weather occurred during the last 10 days, practically all of the snow remained on the ground at the end of the month. It is fairly solid, and the conditions at the beginning of the winter were favorable for next season's stream flow. In Wyoming and Colorado there was less snow than generally falls in November, although in Wyoming there was a fair accumulation in the mountains at the close of the month, when 4 to 20 inches were measured across the Medicine Bow Mountains, 18 inches at Dome Lake, in the Big Horn Mountains, and 5 to 27 inches over the Yellowstone Park region. In the Black Hills district of South Dakota the total fall ranged from 3 to 18 inches, and on the 30th the amount on the ground ranged from a trace to 5 inches. This snow was very beneficial in preventing forest fires that have been frequent and destructive in the Black Hills.

RIVERS.

River stages were abnormally low. The light precipitation was absorbed by the dry ground and had no appreciable effect upon stream flow. At Hermann, Mo., on the Missouri River, 103 miles above its mouth, the gage reading was 3.9 on the first of the month. The water fell gradually and reached a reading of 3.4 on the 12th. This stage prevailed without change until the 29th; on the 30th it fell to 3.3. Since 1872 there have been 6 lower stages at Hermann in November. They were 3 in 1873, 3.1 in 1894 and 1895, 2.9 in 1896,1.2 in 1897, and 3.2 in 1902. At Hannibal, Mo., on the Mississippi, 113 miles above its confluence with the Missouri, there have been 5 stages in November that were lower than the reading of 0.6 that was reached in November, 1910. They were 0.2 in 1872, 0.1 in 1889, −1.0 in 1891, 0.3 in 1893, and −0.2 in 1895. At St. Louis a reading of 1.7 was recorded on the 17th 19th, 20th, and 21st of the month just passed, and is the lowest point to which the water has fallen in November since observations began in 1861. The previous low record was 2.2 in 1895. The Hannibal and Hermann stages that were lower than they were in 1910 have occurred in the same year only twice—in 1893 and 1895. They caused a minimum reading at St. Louis of 2.5 in 1893 and 2.2 in 1895. They did not give a stage as low as the 1.7 of 1910 because in 1893 the minimum stage at Hannibal occurred on the 28–30th, and at Hermann it occurred on the 1st, causing the low-water effects not to be felt at St. Louis simultaneously. Similar conditions prevailed in 1895, as the minimum at Hannibal occurred on the 28th, and at Hermann on the 1st–6th, while in November, 1910, the lowest readings prevailed at both stations throughout practically all of the latter half of the month. This indicates the rather unusual condition of the coincident prevalence of dry weather over the drainage areas of both the Missouri and the Mississippi above St. Louis.

MISCELLANEOUS.

In Montana, Wyoming, Colorado, the Dakotas, and Nebraska work on the government irrigation projects progressed favorably. There was very little time lost on account of precipitation, and such operations as were practicable in the late fall and early winter were carried forward with hardly any interruption.

The superintendent of the Great Northern Railway in South Dakota has reported that in making excavations for various reasons along the road the ground was found dry and pulverized for a depth of many feet, and to a greater degree than has been observed for many years. Practically all sloughs are dry and the water in lakes and rivers is exceedingly low. Where the railroad company depends upon lakes and rivers for water supply the low stages have caused great inconvenience, and the same trouble has been experienced elsewhere, for some of the wells have gone dry. It appears, also, that the wind movement has been less than it usually is, for at one or two stations having wells operated by windmills the water supply was exhausted on account of lack of wind to operate the mills. However, so far as the physical condition of the roadbed is concerned the month was favorable, for there were not, as in other seasons, freezes followed by thaws, causing the roadbed to heave and the track to become rough—a condition that is very difficult to correct after the bed has once frozen up for the winter. These remarks are considered of interest and the conditions outlined doubtless prevail in other portions of the Missouri River drainage area above the 2,000-foot contour, where precipitation has been abnormally low for the greater portion of the time since the beginning of the summer.

TABLE 1.—*Climatological data for November, 1910. District No. 6, Missouri Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																				
Barnum	Johnson	5,500	5								0.67		0.60	2.0	2	13	9	8	w.	Thomas Freegaurd.
Basin	Big Horn	3,862	11																	O. J. Robertson.
Bennett	Carbon		2								0.07		0.07		1	13	14	3	w.	Chas. C. Young.
Big Creek Station	do																			U. S. Forest Service.
Burns	Laramie		1																	Henry D. Colburn.
Cheyenne	do	6,088	30	39.2	+ 4.3	66	25	6	27	37	0.29	− 0.12	0.15	2.8	4	5	13	12	w.	U. S. Weather Bureau.
Chugwater	do	5,282	9	40.6	+ 4.3	70	25	9	27†	46	0.39	− 0.12	0.19	2.0	3	8	14	8	w.	George Milne.
Clark	Big Horn	4,320	4	38.8		65	11	14	27	30	0.81		0.42	0.8	5	8	10	12	w.	Chas. A. C. Snow.
Cody	do	5,000	3																	F. A. Fish.
Crystal Lake	Laramie	6,900	1																	Cheyenne City Engineer.
Dome Lake	Sheridan	8,821	2	24.4		47	11	− 3	27	35	3.20		0.65	32.0	12	12	4	14	sw.	Chas. Hidlay.
Douglas	Converse	4,793	1	36.5		68	11	6	26	38	0.21		0.05		5					Henry C. Miller.
Dubois	Fremont	6,909	3	34.0		60	11	0	27	39	0.05		0.05	0.5	1	7	18	5	nw.	Dr. F. H. Welty.
Eatons Ranch	Sheridan	4,600	5	38.2		69	8	15	27	35	0.55		0.20	5.5	4	12	12	6	w.	F. A. Eaton.
Echeta	Crook	4,200	1								0.48		0.25	2.0	4	17	7	6	n.	M. R. Hunter.
Elk Mountain	Carbon		5								0.11		0.06	2.0	2					Wm. Richardson.
Encampment	do	7,322	1	36.0*				3	27	28*	0.15		0.14		2	10	7	8	w.	U. S. Forest Service.
Ervay	Natrona		1	36.2		59	11	8	27	32	0.06		0.03		2	9	14	7	sw.	Frank Jameson.
Fort Laramie	Laramie	4,270	32	38.4	+ 3.6	72	25	8	27	60	T.	− 0.34	T.	T.	0	14	14	2	nw.	John Hunton.
Fox Creek Station	Albany	9,015																		U. S. Forest Service.
Gillette	Crook	4,546	4	36.2		69	12	12	27	38	0.30		0.20	3.0	2	12	13	5		S. D. Perry.
Hunters Station	Johnson	8,000	4	30.7		56	12	− 5	27	41	1.07		0.26	16.0	8	18	6	6	w.	U. S. Forest Service.
Hyattville	Big Horn	4,632	11	38.0	+ 1.3	66	12	7	27	36						15	6	9	w.	Wm. Booth.
Jireh	Converse	5,050									0.36		0.26	1.0	3	11	12	7	nw.	P. L. Ford.
Kirtley	do		6	37.0	+ 1.2	66	8†	13	27†	40	0.39	+ 0.09	0.18		3	19	9	2	nw.	D. M. Zum Brunnen.
Kirwin	Big Horn	9,187	2																	C. L. Tewksbury.
Knowles	Crook		1								0.73		0.27	7.3	6					G. A. Knowles.
Lander	Fremont	5,372	18	35.4	+ 6.7	64	8	7	27	40	T.	− 0.60	T.	T.	0	5	19	6	ne.	U. S. Weather Bureau.
Laramie	Albany	7,188	19	38.2	+ 6.2	60	8†	14	5	37	0.06	− 0.18	0.06	0.6	1	24	4	2	sw.	University of Wyoming.
Leo	do	6,878	9	36.0	+ 3.2	60	10†	4	27	38	0.11	− 0.21	0.10	1.5	2	5	14	6	w.	C. A. Cowdin.
Loisbama Ranch	Big Horn	7,052	6	28.9	− 0.7	59	2	5	29	45	0.80	+ 0.16	0.20	6.5	7	8	10	12	w.	Mary E. Painter.
Lovell	do	3,825	5	34.6	+ 3.3	58	8	− 4	27	33	0.66		0.23	2.5	7	14	12	4	n.	R. Fred Harrison.
Lusk	Converse	5,007	20	36.2		67	10†	10	26	46	0.00		0.00	0.0	0					D. E. Goddard.
Manville	do	5,050	1								0.33		0.20	5.0	5	18	6	6	w.	C. A. Sherman.
Moorcroft	Crook	4,111	7																	James K. Somers.
Moore	Albany	6,000	9	42.4	+ 4.4	69	12	12	27	31	0.51	+ 0.01	0.38	1.4	5	8	12	8	w.	Edwin Moore.
Newcastle	Weston	4,319	3	35.0		66	25	9	27	40	0.12		0.12	T.	1	20	8	2	n.	Dr. S. W. Johnson.
Pathfinder	Natrona	5,735	4	39.8	+ 3.2	62	2	12	27	33	0.21	+ 0.05	0.18	1.0	2	25	3	2	sw.	U. S. Reclamation Service.
Phillips	Laramie	4,900	7																	Mrs. Arthur Rugg.
Powell	Big Horn	4,376	3	35.6		60	5†	4	27	35	0.55		0.42	0.2	4	11	14	5	nw.	U. S. Reclamation Service.
Rawlins	Carbon	6,748	8	37.6	+ 3.8	58	11	7	27	31	0.11	− 0.43	0.11	1.5	1	9	15	6	w.	E. J. Ehrenfeld.
Riverton	Fremont	4,960	2																	J. F. Nelson, jr.
Saratoga	Carbon	6,785	12	37.8	+ 5.8	60	8	− 5	26	50	0.20	− 0.39	0.20	2.0	1	17	6	7	w.	Saratoga & Enc'pm'nt Ry.
Sheridan	Sheridan	3,790	15	34.0	+ 1.6	65	6	10	27	35	0.84	+ 0.16	0.31	1.2	11	4	11	15	nw.	U. S. Weather Bureau.
Shoshone Dam	Big Horn	5,385	4	37.9		64	12	6	27	31	1.18		0.43	4.0	6	15	7	8	w.	U. S. Reclamation Service.
Soldiers Home	Johnson	4,635	18	36.2	− 0.1	65	8	11	27	40	1.28	+ 0.82	0.35	6.0	5	2	25	3	nw.	Geo. L. Courtney.
South Pass City	Fremont	7,873	8	29.0		54	11	− 8	27	40	1.19		0.40	14.6	7	12	12	6	sw.	John Sherlock.
Thermopolis	do	4,350	6	36.2	+ 1.2	69	12	4	27	54	0.19		0.15	2.2	3	20	7	3	sw.	A. L. Duhig.
Upton	Weston		1								0.30		0.26	1.5	3	7	18	5	ne.	C. E. McPherren.
Valley	Big Horn	6,500	1								0.09		0.03		3	11	10	9	w.	Jas. L. McLaughlin.
Verona	Sheridan		1								1.07		0.51		4	4	20	6	nw.	O. A. Roode.
Wiants Ranch	Carbon	7,400									0.06		0.06	1.0	1	11	11	8	sw.	Ira G. Wiant.
Wiley	Big Horn	5,375	1								0.05		0.05	1.5	1	12	4	14	w.	C. D. Marshall.
Wyncote	Laramie	4,207	3	39.8		73	25	10	27†	57	0.00		0.00	0.0	0	20	6	4	nw.	U. S. Reclamation Service.
Yellowstone Park	Yellowstone Park	6,200	22	31.2	+ 1.9	55	11	0	27	27	1.53	− 0.09	0.44	12.6	14	4	9	17	s.	U. S. Weather Bureau.
(1) Fountain Hotel	do	7,220	4	28.8		58	24	− 15	27	38	2.00		0.31		14	15	2	13	w.	U. S. Army.
(2) Grand Canyon	do	7,900	3	23.8		45	2	− 22	27	37	3.61		0.60	35.1	14	9	8	13	w.	Do.
(3) Lake Hotel	do	7,733	6	29.1		47	11	− 13	27	32	1.67		0.23		9	6	0	24	s.	Do.
(4) Norris	do	7,525	6	25.4		50	11	− 25	27	39	2.95		0.50		10	3	8	19	w.	Do.
(5) Riverside	do	6,500	4	29.9		53	11	− 17	27	35	1.47		0.24		14	10	3	17	w.	Do.
(6) Soda Butte	do	7,000	5	29.0		56	11	− 15	27	46	1.40		0.30	14.0	11	12	11	7	sw.	Do.
(7) Sylvan Pass	do	7,000	3	27.0		51	3†	− 4	27	41	2.40		0.39	27.1	12	12	1	17	w.	Do.
(8) Thumb	do	7,772	4	26.4		50	2	− 10	27	40	3.27		0.65	34.8	13	13	2	5	sw.	Do.
(9) Tower Falls	do	6,250	1	31.2		59	11†	− 19	27	42	1.60		0.50	16.0	7	10	9	11	nw.	Do.
(10) Upper Gey. Basin	do	7,395	6	26.0		46	3	− 12	27	27	2.75		0.60	24.0	13	11	0	19	sw.	Do.
Montana.																				
Adams	Dawson		2	27.8		59	6†	− 5	30	39	0.19		0.14	5.0	2	8	11	11	nw.	W. B Ennis.
Adel	Cascade	5,200	11	34.0	− 0.2	63	12	1	27	35	2.03	+ 1.14	1.20	15.5	6	14	7	9	w.	Bessie F. Burch.
Agricultural College	Gallatin	4,700	12	33.4	− 6.1	62	2	4	27	30	1.70	+ 0.72	0.58	11.0	7	3	12	15	sw.	E. Burke.
Augusta	Lewis & Clark	4,071	12	32.6	+ 1.2	64	2	− 17	27	44	1.07	+ 0.48	0.70	7.0	2	17	3	10	w.	C. C. Covington.
Babb	Teton	4,461	4	31.6		56	2	− 3	29	35	0.78		0.35	8.0	7	2*	12*	15*	sw.	U. S. Reclamation Service.
Bald Butte	Lewis & Clark	6,500	1								2.60		0.50	31.7	15	6	10	14		Matt W. Alderson.
Big Timber	Sweetgrass	4,072	5	38.2		68	1	11	26†	37	0.70		0.45	9.0	3	12	5	13	w.	F. A. Severance.
Big Timber Creek	do										1.48		0.30	10.1	11	6	17	7	w.	J. T. Mjolsness.
Billings	Yellowstone	3,115	15	37.0	+ 2.5	69	7	10	27	39	0.95	− 0.05	0.25		7				w.	U. S. Weather Bureau.
Boulder Nursery	Jefferson	4,920	14	31.9*	+ 0.7	60	2	2	27	46						3*	11*	11*		U. S. Forest Service.
Bowen	Beaverhead	6,060	4	25.6		56	2	− 29	27	41	2.25		0.45	15.9	16	2	13	15		B. B. Lawrence.
Bridger	Carbon	3,664	2	35.5		65	7†	8	27	36	0.33		0.33	T.	1	6	11	13	s.	L. E. Gard.
Broadview Exp. Station	Yellowstone		4	33.0		62	11	− 2	27	40	0.18		0.18	4.0	1	1	26	3	w.	Dr. W. X. Sudduth.
Busby	Rosebud		5	34.0		65	7	0	27	41	1.33		0.45	11.5	10	6	13	11	w.	C. A. Linscheid.
Busteed	Sweetgrass		2	34.7		67	11	9	27	36	0.52		0.14	5.3	11	9	11	10	w.	Thos. H. Busteed.
Cabin Creek	Beaverhead										0.95		0.53	9.2	4	13	0	17	nw.	W. J. Crowell.
Canyon Ferry	Lewis & Clark	3,644	12	35.0	+ 2.3	65	10	2	27	29	0.91	+ 0.45	0.29	5.5	7	9	9	12	nw.	A. C. Pratt.
Cascade	Cascade	3,361	5	37.0		67	2†	− 12	27	44	1.15		0.60	9.5	6	13	6	11	sw.	E. E. James.
Chessman Reservoir	Lewis & Clark	5,275	2	29.8		55	2	− 4	27	28	2.09		0.56	15.2	12	15	3	12	sw.	Chas. D. Schmidt.
Chester	Chouteau	3,140	7																	Great Nor. Exp. Station.
Chinook	do	2,502	10	30.5'		68'	8	5'	30	44'	0.55		0.26		4	3*	13*	9*		Thos. O'Hanlon Co.
Chouteau	Teton	3,810	6																	Henry Davidson.
Clear Creek	Chouteau		4								0.84		0.28	5.3						Cortez Sedgwick.
Clemons	Lewis & Clark	4,672	1								0.73		0.40	3.1	2	6	14	10	w.	Frank Eberl.
Clydepark	Park		1								1.05		0.22	5.0	13	8	8	14	w.	L. B. Marquis, M. D.
Copper	Meagher		5								1.49		0.35	11.0	12	7	7	16	nw.	Orville Harris.
Crow Agency	Rosebud	3,041	28	33.6	+ 1.5	66	7	− 4	27	36	2.21	+ 1.45	0.57	11.5	9	8	12	10	nw.	F. E. Server.
Culbertson	Valley	1,927	8	25.8		60	6	− 12	30	38	0.23		0.08	5.5	4	4	10	16	nw.	G. H. Coulter.
Cut Bank	Teton	3,700	12	30.2	+ 2.8	60	4†	− 17	27	45	0.08	− 1.11	0.08	4.0	1	15	8	7	w.	Chas. N. Thomas.
Decker	Rosebud	3,400	6	34.0		65	2†	2	24	45	0.40		0.40	4.0	1					Adam Anderson.
Delpine	Meagher	5,000	1																	T. L. Holliday.
Denton	Fergus		2	33.3		62	7	1	27	42	0.55		0.24	5.1	6	6	5	19	nw.	P. T. Griesenauer.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Montana—Continued.																				
Dillon	Beaverhead	5,147	13	39.0	+ 3.8	70	10	— 4	27	47	1.59	+ 0.73	0.52	9.6	8	12	8	10	sw.	J. E. Monroe.
Dirty Creek	Meagher	6,000	1	.....	.....	.....	.....	.....	.....	.....	1.47	.....	0.29	27.7	12	10	6	14	w.	Lewis Cameron.
Dry Creek	Broadwater	5,500	1	.....	.....	.....	.....	.....	.....	.....	4.35	.....	0.63	33.8	17	9	14	7	nw.	J. C. Stuart.
Dry Wolf Camp	Cascade	6,000	1	.....	.....	.....	.....	.....	.....	.....	1.62	.....	0.55	19.4	10	11	11	8	n.	Mrs. R. J. Eveleth.
East Gallatin River	Gallatin	6,000	1	.....	.....	.....	.....	.....	.....	.....	2.45	.....	0.41	23.5	13	9	3	18	w.	John Eberhart.
Ekalaka	Custer	.....	10	32.3	— 0.6	68	8	1	30	36	0.15	.....	0.08	1.5	3	16	9	5	n.	Wm. Freese.
Elkhorn	Jefferson	6,576	1	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.24	11.3	11	5	5	20	w.	James Heagan.
Evans	Cascade	4,900	3	35.4[a]	.....	52	20	0	26	33[a]	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. Thrasher.
Fallon	Custer	2,208	6	29.6	.....	65	6†	— 3	30	42	0.86	.....	0.36	.....	3	10[d]	13[d]	3[d]	.....	Mrs. A. C. Gifford.
Family§	Teton	3,950	1	29.0	.....	66	2	— 13	27	38	0.22	.....	0.12	6.8	5	5	6	19	w.	U. S. Reclamation Service.
Fish Creek§	Silver Bow	8,500	1	27.1	.....	48	2†	— 2	26	26	2.26	.....	1.15	27.0	5	.....	.....	.....	.....	O. B. Tilton.
Fishtail Creek	Carbon	5,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. E. Haskin.
Flathead Creek	Gallatin	6,000	1	.....	.....	.....	.....	.....	.....	.....	4.65	.....	0.60	28.6	14	6	7	17	nw.	L. G. Brown.
Forsyth	Rosebud	2,514	4	33.8	.....	67	6	4	27†	41	0.43	.....	0.15	4.3	4	11	8	11	e.	J. M. Patterson, jr.
Fort Benton	Chouteau	2,630	30	33.0	+ 2.2	62	8	— 3	30	28	1.13	+ 0.56	0.35	3.0	5	12[e]	13[e]	0[e]	sw.	Jere Sullivan.
Fort Shaw	Cascade	3,500	22	.....	.....	.....	.....	.....	.....	.....	0.35	— 0.07	0.20	3.0	2	.....	.....	.....	.....	U. S. Reclamation Service.
Fort W. H. Harrison§§	Lewis & Clark	4,004	6	28.6	.....	56[a]	6†	— 14	25†	52[a]	.....	.....	.....	.....	.....	12	9	9	w.	Post Hospital.
Foster	Yellowstone	.....	1	34.5	.....	68	6	1	26	37[a]	0.81	.....	0.39	1.8	5	8[a]	7[a]	14[a]	n.	E. K. Bowman.
Garneil	Fergus	5,500	1	33.7	.....	56	12	— 2	28	34	1.05	.....	.....	9.0	....	10	7	13	nw.	Thos. E. Scally.
Glendive	Dawson	2,069	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. B. Walker.
Goldbutte	Chouteau	.....	3	30.2	.....	61	7	— 1	28	33	0.16	.....	0.04	6.0	6	7	12	11	w.	J. T. Berthelote.
Graham	Custer	.....	4	34.8	.....	64	11	4	30	34	0.41	.....	0.14	2.0	5	11	12*	7	sw.	J. S. Rue.
Grayling	Gallatin	6,700	4	26.2[d]	.....	52	2	— 19	27	39	1.92	.....	0.36	14.5	15	5[d]	3[d]	18[d]	sw.	P. Kerzenmacher.
Great Falls	Cascade	3,350	19	35.4	+ 0.6	64	10	— 6	27	40	1.39	+ 0.55	0.61	6.4	8	8	15	7	sw.	S. H. Bauman.
Half Moon Pass	Fergus	6,500	1	.....	.....	.....	.....	.....	.....	.....	2.38	.....	0.40	18.0	16	7	20	3	w.	Thos. Stigen.
Half Way House	Broadwater	6,000	1	.....	.....	.....	.....	.....	.....	.....	2.57	.....	0.45	18.3	14	11	12	7	ne.	Gordon Deans.
Harlowton	Meagher	4,165	2	31.6	.....	61	11	0	27	33[b]	.....	.....	.....	.....	.....	8[b]	1[b]	19[b]	w.	Joseph Muir.
Havre	Chouteau	2,505	30	29.4	— 1.2	61	7	— 3	30	40	0.69	— 0.08	0.20	5.1	9	1	8	21	e.	U. S. Weather Bureau.
Helena	Lewis & Clark	4,110	30	34.0	+ 1.3	61	10	2	27	27	1.64	+ 0.92	0.86	15.3	10	5	9	16	w.	Do.
Highwood	Chouteau	.....	3	.....	.....	.....	.....	.....	.....	.....	1.27	.....	0.35	9.3	9	10	5	15	sw.	W. S. McCord.
Homepark	Madison	.....	5	.....	.....	.....	.....	.....	.....	.....	0.84	.....	0.26	6.5	5	7	9	14	e.	H. L. Miller.
Huntley	Yellowstone	3,014	4	36.4	.....	62	13	13	27	30	1.21	.....	0.45	3.0	3	6	20	4	e.	U. S. Reclamation Service.
Jones Canyon	Gallatin	6,800	1	.....	.....	.....	.....	.....	.....	.....	3.43	.....	0.47	22.8	12	.....	.....	.....	w.	Jas. McCune.
Jordan	Dawson	.....	5	30.6	.....	62	7	— 10	30	39	0.00	.....	0.00	0.00	0	16	0	14	nw.	W. C. Henderson.
Lewistown	Fergus	4,010	13	33.6	+ 0.9	62	2	— 8	27	46	0.98	+ 0.06	0.54	11.0	7	8	16	6	w.	W. W. Watson.
Livingston	Park	4,488	13	38.9	+ 2.5	70	3	8	26	39	1.50	+ 0.55	0.50	9.5	9	8	14	8	sw.	Lewis Terwilliger.
Lonetree	Chouteau	.....	5	34.2	.....	66	7	— 10	27	29	1.39	.....	0.87	10.0	5	12	2	16	w.	E. Wilson.
Lost Horse Creek	Meagher	5,800	1	.....	.....	.....	.....	.....	.....	.....	1.73	.....	0.20	16.5	12	9	12	9	w.	C. M. Mason.
Malta	Valley	2,240	3	28.0	.....	61	6	— 17	30	43	0.51	.....	0.25	4.7	6	8	14	8	w.	U. S. Reclamation Service.
Meadow Creek	Madison	6,700	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. E. Parent.
Melstone	Fergus	2,903	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. J. Parkinson.
Mildred	Custer	.....	1	.....	.....	.....	.....	.....	.....	.....	0.34	.....	0.16	3.0	3	.....	.....	.....	.....	Leon B. Clarke.
Miles City	....do	2,371	19	34.4	+ 3.5	66	6	3	30	39	0.22	.....	0.11	0.3	4	12	16	2	nw.	U. S. Weather Bureau.
Moore	Fergus	.....	3	.....	.....	.....	.....	.....	.....	.....	1.13	+ 0.53	0.50	6.4	8	7	18	5	ne.	Clyde Grove.
Norris	Madison	4,845	4	.....	.....	.....	.....	.....	.....	.....	0.86	.....	0.20	6.0	6	8	16	6	sw.	Madison River Power Co.
Nye	Sweetgrass	.....	2	36.4	.....	70	11	4	30	49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Olsen Creek	Jefferson	6,345	1	.....	.....	.....	.....	.....	.....	.....	0.61	.....	0.19	7.4	8	18	3	9	sw.	F. L. Bryant.
Pipestone Pass	....do	7,000	1	.....	.....	.....	.....	.....	.....	.....	1.69	.....	0.30	11.6	10	7	8	15	w.	Robt. Olsen.
Poplar	Valley	2,020	25	27.6	+ 1.4	60	6	— 14	30	42	1.53	.....	0.50	12.5	8	9	11	10	ne.	Mrs. Theola Kiermeyer.
Raymond§§	Teton	4,260	5	31.0	.....	64	2†	— 6	29	38	0.40	— 0.34	0.30	4.0	2	20	4	6	e.	H. M. Cozier.
Red Lodge	Carbon	5,548	10	31.6	— 1.4	60	7	4	26	32	0.69	.....	0.30	5.7	3	12	11	7	w.	W. H. Campbell.
Reese Creek	Gallatin	5,000	1	.....	.....	.....	.....	.....	.....	.....	0.63	.....	0.18	4.0	6	5	12	13	se.	I. A. Draper.
Renova	Jefferson	4,383	11	36.0	.....	63	2	0	27	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	Henry Cramer.
Rimini	Lewis and Clark	7,900	2	.....	.....	.....	.....	.....	.....	.....	1.18	+ 0.70	0.43	4.2	6	10	6	14	sw.	F. B. Elmer.
Ryegate	Yellowstone	3,640	1	38.9	.....	61	11†	15	29	26	.....	.....	.....	.....	.....	.....	.....	.....	.....	Milo Brooks.
Sedan	Gallatin	3,155	2	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.15	1.5	1	16[a]	0	13[a]	.....	H. W. Scherfenberg.
Springbrook	Dawson	.....	9	29.6	— 3.4	62	6	— 8	30	42	.....	.....	.....	.....	.....	.....	.....	.....	.....	Asa Hennes.
Stearns	Lewis and Clark	4,500	1	.....	.....	.....	.....	.....	.....	.....	0.42	— 0.24	0.20	4.2	3	4	9	17	sw.	Mrs. H. L. Miller.
Three Forks	Gallatin	4,066	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.40	6.0	2	15	0	15	.....	J. W. Hardgrove.
Tokna § §§	Dawson	2,050	5	28.2	.....	64	8	— 6	30	46	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. A. Adams.
Townsend	Broadwater	3,790	1	.....	.....	.....	.....	.....	.....	.....	0.59	.....	0.35	4.0	3	12	8	10	w.	U. S. Reclamation Service.
Trail Creek	Park	6,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	River Observer.
Utica	Fergus	5,000	16	35.0	+ 1.1	68	11	1	30	32	2.23	.....	0.29	33.8	13	16	7	7	w.	Andrew Wiedenbauer.
Valentine	....do	.....	4	31.2	.....	64	7	—10	30	36	0.73	— 0.18	0.34	4.5	5	20	7	3	w.	P. W. Korell.
Virginia City	Madison	5,880	22	32.6	+ 3.7	57	2	— 2	27	27	0.31	.....	0.17	.....	5	16	0	14	w.	B. M. Bean.
Wall Rock Mountain	Broadwater	5,600	1	.....	.....	.....	.....	.....	.....	.....	2.12	+ 1.19	0.65	12.5	13	5	14	11	w.	Francis Mailand.
Warm Springs Creek	Madison	7,500	1	.....	.....	.....	.....	.....	.....	.....	1.92	.....	0.40	25.5	15	8	11	11	.....	D. L. Doig.
Willow Creek	Park	9,000	.....	.....	.....	.....	.....	.....	.....	.....	2.23	.....	0.28	19.6	16	6	4	20	sw.	M. D. Lytle.
Wolf Creek	Lewis and Clark	4,000	5	39.1[e]	.....	66	12	8	29	38[e]	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Topp.
Wolf Point	Valley	1,995	.....	.....	.....	.....	.....	.....	.....	.....	1.22	.....	0.61	.....	3	0[e]	1[e]	22[e]	sw.	A. W. Verharen.
Woodville	Jefferson	6,376	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	River Observer.
North Dakota.											1.68	.....	0.45	16.6	12	6	16	8	w.	Anna Kinman.
Aplin	Oliver	.....	3	25.7	.....	56[a]	8	— 5	29	34[a]	0.17	.....	0.12	1.5	2	5	8	17	nw.	J. B. Hagelbarger.
Beach	Billings	2,759	3	26.7	.....	62	8	— 7	30	37	0.73	.....	0.30	3.5	4	16	10	4	nw.	D. J. Steiner.
Berthold Agency	McLean	2,082	13	25.2	— 2.9	62	6	— 9	29	43	0.13	— 0.48	0.05	1.1	3	10	5	15	n.	C. L. Hall.
Bismarck	Burleigh	1,674	35	26.6	+ 0.6	63	8	— 1	30	38	0.14	— 0.54	0.12	0.2	2	6	8	16	nw.	U. S. Weather Bureau.
Broncho	Mercer	.....	2	25.8	.....	65	8	— 2	30	40	T.	.....	T.	T.	0	2	25	3	nw.	E. M. Walker.
Buford	Williams	1,944	4	27.1[f]	.....	68[a]	7	— 7	28†	53[a]	0.68	.....	0.50	6.8	3	0	0	30	w.	G. O. Sanford.
Coal Harbor	McLean	1,901	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. H. Childs.
Dickinson	Stark	2,453	17	27.2	+ 0.2	65	8	— 3	30	44	0.15	— 0.44	0.11	0.4	3	8	9	13	nw.	L. R. Waldron.
Edgeley	Lamoure	1,468	8	26.0	— 4.9	59	8	2	30	46	0.16	— 0.30	0.13	0.3	2	11	3	16	nw.	O. A. Thompson.
Epping	Williams	.....	2	.....	.....	.....	.....	.....	.....	.....	0.32	.....	0.22	7.5	3	9	8	13	nw.	M. E. Ugan.
Fullerton	Dickey	1,439	11	25.9	— 3.1	53	6	2	28†	41	0.14	— 0.46	0.06	0.4	4	11	11	8	nw.	F. O. Allin.
Haley	Bowman	.....	2	34.6	.....	66	8	14	30	29	T.	.....	T.	T.	0	9	12	9	nw.	A. M. Oberchain.
Hettinger	Adams	2,253	3	29.3	.....	65	8	— 3	30	38	T.	.....	T.	T.	0	5	22	3	nw.	F. E. Ellickson.
Howard	Williams	2,275	3	19.4	.....	57	6	—19	30	44	1.10	.....	0.37	10.5	5	6	9	15	nw.	C. P. Amsbaugh.
Jamestown	Stutsman	1,390	22	25.3	— 0.9	54	8†	1	28†	44	0.15	— 0.65	0.15	1.5	2	10	1	19	nw.	L. B. Baldwin.
Lamoine	Kidder	.....	2	23.0	.....	60	8	— 6	29	43	T.	.....	T.	T.	0	14	3	13	nw.	E. V. Virgin.
La Moure	Lamoure	1,307	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. O. Ellison.
McHenry	Eddy	1,509	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Knox.
Manfred	Wells	1,605	8	23.0	.....	58	6†	— 5	30	46	0.40	.....	0.20	4.0	3	6	14	10	nw.	P. B. Anderson.
Marmarth	Bowman	.....	2	.....	.....	.....	.....	.....	.....	.....	0.13	.....	0.06	1.0	4	9	9	12	nw.	S. P. Grane.
Marstonmoor	Stutsman	.....	2	21.5	.....	56	8	— 9	28	43[a]	T.	.....	T.	T.	0	.....	.....	.....	nw.	H. H. McCumber.
Medora	Billings	2,225	13	30.0	+ 1.0	68	2	— 7	29	48	T.	— 0.38	T.	T.	0	5	19	6	e.	J. W. Hesser.
Melville	Foster	1,590	12	23.2[e]	— 5.1	60	9	— 3	30	45[e]	0.28	— 0.01	0.23	0.5	2	.....	.....	.....	nw.	J. P. Kidder.
Mott	Hettinger	.....	3	28.2	.....	67	8	— 2	29	39	0.10	.....	0.10	0.0	1	7	11	12	w.	O. H. Opland.
Napoleon	Logan	1,955	18	25.1	— 0.2	62	6	— 2	29†	49	0.14	— 0.68	0.14	T.	1	10	6	14	nw.	C. J. Hoof.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees, Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota—Con.																				
New England	Hettinger	2,400	14																	W. C. McKenzie.
New Salem	Morton	2,163	3	27.3	.....	65	8	− 1	30	39	0.03	.....	0.03	.....	1	4	14	12	nw.	J. Christianson.
Orange	Adams	.....	3	28.0	.....	66	8	− 2	30	37	0.12	.....	0.12	1.0	1	13	10	7	nw.	J. E. Goforth.
Palermo	Ward	2,200	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. A. McCann.
Schafer	McKenzie	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. L. Clark.
Steele	Kidder	1,857	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. C. Smith.
Washburn	McLean	1,731	6	26.1	.....	66	8	0	30	40	0.16	.....	0.14	0.8	2	5	15	10	w.	W. R. Peterson.
Williston	Williams	1,875	30	23.4[e]	− 1.8	60	6	−10	28	36[e]	0.66	+ 0.06	0.50	6.4	4	7	16	7	nw.	U. S. Weather Bureau
Wishek	McIntosh	2,010	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. E. Timm.
South Dakota.																				
Aberdeen	Brown	1,300	20	27.6	− 0.9	54	6	5	30	38	0.20	− 0.71	0.15	T.	2	16	3	11	nw.	D. G. Gallett.
Academy	Charles Mix	.....	11	33.8	− 3.0	61	6†	9	28	35	0.15	− 0.35	0.15	T.	1	15	11	4	nw.	I. T. Lothrop.
Alexandria	Hanson	1,352	21	33.9[f]	+ 1.1	60	3	15	12†	37[f]	0.15	− 0.52	0.15	T.	1	.....	.....	.....	.....	W. S. Hill.
Ardmore	Fall River	3,557	1	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	0.0	1	18	7	5	e.	Agt. C., B. & Q. R. R.
Armour	Douglas	1,521	15	32.2	− 2.3	60[a]	6	0	30	43[a]	.....	.....	.....	.....	.....	22	3	5	n.	T. J. Markey.
Belle Fourche	Butte	3,000	2	33.4	.....	68	8	6	18	41	0.16	.....	0.10	.....	2	11	9	10	nw.	U. S. Reclamation Service.
Brookings	Brookings	1,636	21	29.6	− 0.1	52	6†	5	11†	39	0.17	− 0.42	0.06	1.0	4	8	7	15	ne.	Experiment Station.
Camp Crook	Harding	3,000	18	.....	.....	.....	.....	.....	.....	.....	T.	− 0.48	T.	T.	0	20	3	7	nw.	Forest supervisor.
Canton	Lincoln	1,248	15	32.9	− 1.1	69	8	8	28	47	T.	− 1.11	T.	T.	0	22	2	6	nw.	John H. Holsey.
Cascade Springs	Fall River	3,422	2	36.0	.....	69	25	13	18	50	0.41	.....	0.20	0.0	3	15	6	9	nw.	Fred Noerenberg.
Castlewood	Hamlin	1,685	4	28.1	.....	52	6†	4	30	40	0.38	.....	0.21	1.4	5	8	10	12	nw.	M. N. Bradley.
Centerville	Turner	1,229	13	32.2	.....	61	8	7	28	41	0.09	− 0.75	0.04	0.5	3	5	16	9	nw.	Frank Williams.
Chamberlain	Brule	1,363	13	.....	.....	.....	.....	10	28†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. H. Bingham.
Clark	Clark	1,779	16	27.2	− 3.3	52	6	2	30	36	0.56	− 0.21	0.26	1.0	4	10	10	10	nw.	O. H. La Craft.
Cottonwood	Stanley	2,414	2	33.8	.....	68	8	8	30	44	0.53	.....	0.25	1.0	3	11	18	1	nw.	Experiment Station.
Crow Creek	Buffalo	1,385	.....	.....	.....	.....	.....	.....	.....	.....	0.85	.....	0.75	1.2	2	.....	.....	.....	se.	William Fuller.
Daviston	Perkins	.....	1	28.8	.....	62	8	2	30	41	0.34	.....	0.34	T.	1	10	10	10	nw.	G. G. Davis.
Deadwood	Lawrence	4,535	1	34.8	.....	65	8	8	16	39	1.60	.....	0.50	4.7	7	12	7	11	.....	R. E. Grimshaw.
Deerfield	Pennington	6,000	1	.....	.....	.....	.....	.....	.....	.....	0.34	.....	0.10	3.3	7	15	10	5	nw.	Frank E. Miller.
De Smet	Kingsbury	1,726	17	28.8	− 1.8	55	6	4	30	33[a]	0.35	− 0.33	0.15	1.0	3	18	5	7	nw.	J. O. Purintun.
Dowling	Stanley	2,250	1	34.0	.....	70	8	9	30	43	0.34	.....	0.12	0.8	4	6	16	8	nw.	M. P. Dowling.
Dumont	Lawrence	6,195	1	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.37	6.0	7	14	11	5	nw.	A. B. Wood.
Elk Mountain	Custer	4,700	1	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.10	0.6	4	13	8	9	nw.	James E. Blaine
Elk Point	Union	1,127	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	nw.	G. W. Freeman.
Englewood	Lawrence	5,723	1	.....	.....	.....	.....	.....	.....	.....	2.00	.....	0.50	12.5	8	12	5	13	n.	T. J. Cummins.
Eureka	McPherson	1,884	1	28.0	.....	58	8	0	30	36	T.	.....	T.	T.	0	5	16	9	nw.	Experiment Station.
Faulkton	Faulk	1,595	15	28.8	− 0.8	58	8	4	30	39	0.16	− 0.36	0.14	0.5	2	17	3	10	nw.	Miss Belle Talcott.
Flandreau	Moody	1,565	20	30.8	+ 0.3	53	6†	6	30	38	0.22	− 0.68	0.20	0.2	2	9	13	8	n.	W. A. Harris.
Forestburg	Sanborn	1,231	18	31.7	+ 0.7	60	6†	8	29†	44	0.10	− 0.53	0.10	1.0	1	12	11	7	nw.	S. S. Judy.
Fort Meade	Meade	3,624	28	35.6	+ 1.0	72[a]	8	10	14	40[a]	1.06	+ 0.44	0.30	4.0	6	4	21	5	nw.	Post Hospital.
Frederick	Brown	1,371	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Jeffers.
Gannvalley	Buffalo	.....	12	31.6	− 5.7	60	3	8	28†	44	0.20	− 0.30	0.10	1.0	2	9	16	5	nw.	V. P. Drips.
Greenmont	Lawrence	6,430	1	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.25	15.0	9	11	12	7	nw.	H. C. Hoffbuhr.
Greenwood	Charles Mix	.....	16	36.1	− 0.7	67	6†	11	16	44	0.14	− 0.58	0.14	0.0	1	10	16	4	nw.	T. C. Williamson.
Hardy Ranger Station	Lawrence	6,000	1	.....	.....	.....	.....	.....	.....	.....	1.55	.....	0.40	18.0	9	15	4	11	nw.	Ennie A. Gundlach.
Harvey's Ranch	....do	6,282	.....	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.40	5.2	7	17	4	9	w.	Jerome Harvey.
Hermosa	Custer	3,278	4	34.4	.....	70	3†	11	30	45[b]	0.21	.....	0.09	1.0	5	10	14	6	.....	S. M. Booth.
Highmore	Hyde	1,890	14	30.0	− 3.4	60	8	3	30	39	0.40	− 0.11	0.24	2.0	4	11	10	9	nw.	Experiment Station.
Hill City	Pennington	5,067	1	.....	.....	.....	.....	.....	.....	.....	0.62	.....	0.21	.....	4	11	9	10	nw.	H. L. Jones.
Hopewell	Stanley	.....	.....	32.1	.....	61[a]	6†	7	30	42[a]	0.20	.....	0.18	0.2	2	11	14	5	nw.	E. R. Myers.
Howard	Miner	1,564	18	28.8	− 2.6	57	6	2	30	41[a]	0.19	− 0.52	0.10	1.0	3	15	10	5	nw.	J. J. Cox
Howell	Hand	.....	8	29.2	.....	62	6	3	28	45	0.29	.....	0.18	1.8	3	16	7	7	nw.	M. A. Shuster, jr.
Huron	Beadle	1,306	28	29.8	+ 2.4	57	3	5	30	36	0.17	− 0.41	0.06	0.6	3	8	9	13	nw.	U. S. Weather Bureau.
Ipswich	Edmunds	1,530	13	26.6	− 3.0	59	6	3	30	45	0.08	− 0.33	0.08	0.0	1	20	5	5	nw.	J. B. Taylor
Kadoka	Stanley	2,467	1	35.0	.....	69	8	10	30	40	0.24	.....	0.17	0.5	2	9	9	12	nw.	Rev. D. S. Brown.
Kennebec	Lyman	1,689	17	32.6	+ 0.2	65	3	5	28	42	0.23	− 0.19	0.18	0.5	2	13	9	8	nw.	R. C. Van Horn.
Kidder	Marshall	1,295	6	25.4	.....	54	6	2	30	41	0.03	.....	0.03	0.2	1	15	0	15	nw.	H. C. Schussler.
Kimball	Brule	1,788	21	32.2	+ 0.1	58	8	9	30	33	0.01	− 0.56	0.01	0.1	1	18	8	4	nw.	G. D. Rose.
La Delle	Spink	1,400	13	27.6[e]	− 3.9	51	4	3	30	30[e]	0.53	− 0.20	0.20	2.0	3	12	7	11	nw.	E. L. Ebbert.
Lead§	Lawrence	5,200	1	36.2	.....	62	8†	10	30	34	1.16	.....	0.40	6.8	9	9	17	4	nw.	E. F. Irwin.
Lemmon	Perkins	2,345	1	28.5	.....	65	8	0	30	41	T.	.....	T.	T.	0	18	6	6	nw.	W. E. Lyman.
Marion	Turner	1,447	9	32.8	.....	60	1†	7	28	37	0.10	.....	0.10	T.	1	7	14	9	nw.	M. H. Dains.
Marston	Sully	.....	2	29.6	.....	60	3	1	30	43	0.24	.....	0.24	.....	1	8	15	7	nw.	John S. Walker.
Mellette	Spink	1,300	15	29.9	− 0.6	55	3	5	30	37	0.29	− 0.25	0.19	1.0	2	13	9	8	nw.	Frank A. Howe.
Menno	Hutchinson	1,325	13	33.3	− 1.0	64	2	8	30	37	0.05	− 0.82	0.03	0.2	2	14	5	11	nw.	J. H. Swanton.
Milbank	Grant	1,148	19	26.9	− 3.5	55	8	5	30	36	0.28	− 0.46	0.18	1.7	3	11	2	17	nw.	I. T. Patridge.
Mitchell	Davison	1,312	16	31.0	− 2.2	60	6†	9	30	36	0.11	− 0.58	0.07	1.0	2	14	10	6	nw.	C. W. Downey.
Murdo	Lyman	2,300	2	34.4	.....	68	3	9	30	42	0.30	.....	0.30	.....	1	21	4	5	nw.	L. C. Bode.
Oelrichs	Fall River	3,339	18	35.7[b]	+ 1.9	73	25	10	16	45[b]	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. E. Strouse.
Orman	Butte	2,920	4	34.5	.....	67	8	8	18	37	0.34	.....	0.22	1.0	3	7	11	12	nw.	U. S. Reclamation Service.
Ottumwa	Stanley	.....	2	30.7[d]	.....	67	8	1	28	47[d]	T.	.....	T.	T.	0	11	14	5	nw.	J. W. Bretz,
Pierre	Hughes	1,572	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Plankinton§	Aurora	1,528	16	.....	.....	.....	.....	.....	.....	.....	0.03	− 0.51	0.03	T.	1	9	15	6	nw.	W. G. Andrews.
Pollock	Campbell	.....	4	28.5	.....	58	6†	3	29	42	0.02	.....	0.02	0.2	1	7	17	6	nw.	J. H. Jones.
Rapid City	Pennington	3,251	22	33.9	+ 0.3	68	8	11	18	35	0.45	− 0.01	0.20	1.7	7	6	6	18	w.	U. S. Weather Bureau.
Redfield	Spink	1,295	12	30.6	− 0.7	55	3	9	5†	39	0.10	− 0.34	0.10	1.0	1	16	3	11	ne.	A. S. Hall.
Rochford	Pennington	5,228	.....	.....	.....	.....	.....	.....	.....	.....	0.28	.....	0.07	2.8	5	16	9	5	nw.	Mrs. M. E. Deffenbaugh.
Rosebud	Meyer	2,600	16	35.0	+ 0.1	69	8	7	28	49[e]	0.47	− 0.21	0.20	2.0	3	4	23	3	nw.	W. M. Ege.
Roslyn	Day	.....	4	26.0	.....	52	6	1	30	35	0.44	.....	0.37	1.8	2	9	13	8	nw.	O. O. Floren.
Savoy	Lawrence	4,500	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. J. Hall.
Selby	Walworth	.....	2	29.1	.....	56	6	2	30	34[b]	T.	.....	T.	T.	0	13	16	1	nw.	Miss Gertrude Hall.
Sioux Falls	Minnehaha	1,400	19	32.2	+ 0.2	58	8	8	30	37	T.	− 0.85	T.	T.	0	16	6	8	ne.	J. H. Bechtold.
Spearfish	Lawrence	3,647	20	37.2	+ 0.6	67	8	11	30	46	0.58	+ 0.03	0.30	2.0	6	3	14	13	nw.	O. A. Martin.
Stephan	Hyde	1,840	6	29.6	.....	56	3†	2	28	40	0.17	.....	0.12	0.5	2	9	9	12	nw.	Rev. A. Mattingly.
Tama	Meade	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. J. Daly.
Vale	Butte	2,765	2	33.6	.....	70	8	8	18	40	0.19	.....	0.19	1.8	1	14	16	0	nw.	U. S. Reclamation Service.
Vermilion	Clay	1,222	9	35.2	.....	64	8	12	30	38	0.05	.....	0.05	T.	1	19	3	8	nw.	Prof. E. C. Perisho.
Waters' Ranch	Lawrence	4,000	.....	.....	.....	.....	.....	.....	.....	.....	0.88	.....	0.35	3.3	7	11	6	13	nw.	George Waters.
Watertown	Codington	1,735	16	28.4	− 0.1	64	6	4	30	34	0.30	− 0.35	0.10	T.	3	11	7	12	nw.	Robert Q. Wood.
Wentworth	Lake	.....	17	29.7	+ 0.1	53	8	5	30	40	0.13	− 0.57	0.11	0.2	2	19	4	7	nw.	R. C. Zimmerman.
White Lake	Aurora	1,646	1	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	T.	0	11	16	3	nw.	Mrs. G. A. Rogers.
Winner	Tripp	2,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Rawson.
Yankton	Yankton	1,234	36	33.4	− 0.1	63	8	11	30	37	0.02	− 0.77	0.02	T.	1	6	17	7	nw.	U. S. Weather Bureau.
Minnesota.																				
Pipestone	Pipestone	1,710	11	29.7	− 3.1	55	1	4	30	33	T.	− 0.95	T.	T.	0	15	8	7	nw.	W. S. Campbell.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.					Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																				
Akron	Washington	4,650	8								0.15		0.10	1.5	2					Ira M. Barnhouse.
Alma	Park	10,238	13								0.15	− 0.77	0.15	4.0	1	19	0	11	w.	F. H. Clark.
Arriba (near)	Lincoln	5,238	4	41.6		74	3	15	16†	43	T.		T.	1.7	0	22	6	2	s.	C. A. Creel.
Auldhurst	Teller	8,500									0.83		0.42	5.5	3	14	10	6	s.	Mrs. Alice A. Auld.
Boreas	Park	11,489																		Frank Soper.
Boulder	Boulder	5,347	14	45.8	+ 3.1	75	3	20	28	46	0.27	− 0.48	0.14	0.5	3	10	15	5		O. H. Wangelin.
Burlington	Kit Carson	4,160	6	43.3		78	3†	12	28	49	0.08		0.05	0.5	3	5	24	1	nw.	W. P. Davis.
Cassells	Park	8,445									0.32		0.30	5.0	4	15	7	8		Harriet M. Cassell.
Castle Rock	Douglas	6,220	18																	Geo. Tunnicliff.
Cheesman	Jefferson	6,890	7	43.4		67	8	17	20†	42	0.50		0.25	2.0	2	18	12	0	w.	J. G. Thornburg.
Cheyenne Wells	Cheyenne	4,279	18	43.2	+ 3.7	80	3	11	28	54	0.40	− 0.14	0.40	4.0	1	19	7	4	sw.	J. W. Adams.
Cope	Washington		12	45.2	+ 6.7	83	9	12	28	57	0.12	− 0.67	0.10	2.1	2	10	15	5	n.	A. A. Williams.
Corona	Grand	11,660	3	20.8		38	3	− 5	21	34	3.84		1.20	34.0	7				w.	U. S. Weather Bureau.
Denver	Denver	5,272	38	45.6	+ 6.4	75	3	22	27	38	0.16	− 0.36	0.08	1.3	3	7	16	7	s.	Do.
Edgewater	Jefferson	5,450	2	47.2		83	4	22	2†	54	0.11		0.10	1.1	2	11	9	10		Dr. N. P. Levin.
Estes Park Fish Hatchery	Larimer	8,000									0.70		0.20	5.0	5	0	13	17	w.	Gaylord H. Thomson.
Fort Collins	do	4,985	31	40.2	+ 4.9	70	3†	14	27†	47	0.11	− 0.33	0.07	1.8	2	11	14	5	se.	Colorado Agri. College.
Fort Morgan	Morgan	4,319	12	40.5	+ 4.5	78	25	8	28	56	T.	− 0.40	T.	0.0	0	12	12	6	se.	Della M. Scott.
Frances	Boulder	9,300	5	34.8		52	2†	14	27	27	0.35		0.19	5.5	5	5	20	5	w.	D. A. Barry.
Frys Ranch	Larimer	7,500		38.6		61	10†	9	27	40	0.34		0.19	3.5	3	14	12	4	w.	Norman W. Fry.
Georgetown	Clear Creek	8,550	9								0.45		0.25	7.3	4	8	17	5		H. L. Corbett.
Greeley	Weld	4,649	18	41.2	+ 2.9	75	3†	13	27	53	0.11	− 0.44	0.08	1.0	2	18	10	2	ne.	Nelson Reynolds
Grover	do	5,076		40.8		69	3	7	27	42	0.02		0.01	0.3	2	12	10	8	nw.	Geo. M. Blake.
Hartsel	Park	7,670									0.39		0.20	8.5	4	25	2	3		Emily Kleinknecht.
Hawthorne	Boulder	6,000	2								0.26		0.17	T.	3	21	7	2		B. E. Chesebro.
Holyoke (near)	Phillips	3,745	14								0.24	− 0.16	0.19	0.5	2	15	7	8	se.	A. C. Cauble.
Idaho Springs	Clear Creek	7,534	10	39.7	+ 4.9	64	11†	13	27	35	0.20	− 0.36	0.12	3.0	2	1	26	3	w.	J. J. Willis.
Keota	Weld	4,966																		G. J. Farrell.
Kossler	Boulder	7,720	3								0.13		0.05	5.6	3	16	4	10	sw.	East Colo. Power Co.
La Porte	Larimer	5,053	19								0.28	− 0.21	0.15	2.0	2					P. A. Taft.
Le Roy (near)	Logan	4,380	20								0.13	− 0.32	0.09	3.0	3					Chas. Green.
Longmont	Boulder	4,980	8																	Great Western Sugar Co.
Longs Peak (near)	Larimer	8,600	15	30.8	− 0.9	56	1	1	16†	52	0.27	− 0.42	0.27	3.0	1	4	22	4	nw.	Enos A. Mills.
Moraine	do	7,775	20	37.3	+ 3.8	59	2	7	20	33	0.14	− 0.54	0.05	2.7	5	13	12	5	w.	J. D. Stead.
Platte Canon	Jefferson	5,492	11								T.	− 0.47	T.	0.0	0	9	15	6	sw.	Denver Union Water Co.
St. Cloud	Larimer	7,750	7								0.40		0.25	5.0	2	4	21	5	nw.	Miss Guilla Sivers.
Sedgwick	Sedgwick	3,573	2	40.4		80	8†	7	18	60	0.11		0.10	0.0	2	17	13	0	nw.	Dr. Edwin Lewis.
Sill Mine	Clear Creek	11,500	1	24.4		43	3	6	21	32	1.56		0.50	21.7	11	19	4	7	w.	Chas. F. Deininger.
Silver Lake	Boulder										1.50		0.67	21.0	6	10	9	11	e.	Clair V. Mann.
Spicer (near)	Larimer	8,700									0.13		0.05	5.6	3	16	4	10	sw.	Frank W. Murphy.
Sterling	Logan	3,892		40.8		78	25	10	5	55	0.33		0.20	3.5	3	22	4	4	e.	Great Western Sugar Co.
Waterdale	Larimer	5,206	7	43.5	+ 6.5	74	3	18	20†	44	0.26	− 0.29	0.10	2.0	3					P. H. Boothroyd.
Westlake	Boulder		2																	C. R. Keeney.
Wray	Yuma	3,512	14	42.1	+ 3.4	82	25	14	5†	59	T.	− 0.48	T.	0.5	0	10	17	3	nw.	J. C. Tuomey.
Yuma	do	4,138	19								0.02	− 0.47	0.02	0.2	1	15	5	10	se.	Jean Deaken.
Nebraska.																				
Ainsworth	Brown	2,521	5	36.4		73	8	8	30	43	0.21		0.13	T.	2	4	15	11	nw.	John M. Cotton.
Albion	Boone	1,747	12	33.8	− 1.2	72	8	7	16	54d	0.22	− 0.49	0.22	T.	1	18	5	7	nw.	F. M. Weitzel.
Alliance	Boxbutte	3,968	15	36.3	+ 1.9	73	25	2	18	55	T.	− 0.39	T.	T.	0	20	9	1	n.	J. A. Keegan.
Alma	Harlan	1,939	13	40.1	0.0	78	8	12	28	54	0.14	− 0.71	0.14	T.	1	18	10	2	nw.	W. A. Sharpnack.
Anoka	Boyd		4	32.9		70	8	1	16	52	0.20		0.20	0.0	1	3	23	4	nw.	W. Whitla.
Arcadia	Valley	2,186	11								0.16	− 0.34	0.13	0.0	2	12	13	5	nw.	Jas. L. Owen.
Ashland	Saunders	1,100	27	39.2	+ 0.1	76	8	18	16e	39	0.02	− 97	0.02	0.0	1	18	11	1	n.	Dr. A. S. von Mansfelder.
Ashton	Sherman	2,061	17								0.23	− 0.36	0.23	0.0	1	17	8	5	nw.	F. Rein.
Atkinson	Holt	2,108	4	34.4		69	8	10	16†	46	0.10		0.10	1.0	1	16	10	4	nw.	Chas. J. Wilson.
Auburn	Nemaha	1,051	18	41.0	+ 0.2	76	8	16	19	48	0.17	− 1.27	0.12	T.	2	17	10	3	nw.	J. R. Huffman.
Aurora	Hamilton	1,792	15	39.4	+ 1.0	75	8	16	28	41	0.24	− 0.70	0.24	0.0	1	22	5	3	n.	Chi., Burl. & Quincy R. R.
Beatrice	Gage	1,235	19	39.4	0.0	70	7	13	28	44	0.13	− 0.99	0.10	0.0	2	22	4	4	nw.	Wm. S. Waxham.
Beaver City	Furnas	2,147	19	40.2	0.0	77	8	15	20†	47	0.08	− 0.63	0.04	0.0	2	11	12	7	se.	T. M. Davis.
Bellevue	Sarpy	1,210	28	39.0		69	8	19	28	36	0.24	− 1.11	0.12	0.0	2	19	5	6	nw.	Prof. A. A. Tyler.
Benkelman	Dundy	2,968	13																	R. D. Druliner.
Bertrand	Phelps	2,515	2								0.12		0.12	0.0	1	16	11	3		W. F. Dobbin.
Blair	Washington	1,122	15	37.0	− 2.1	68	7†	12	16	40	0.15	− 1.26	0.13	0.0	2	20	6	4	nw.	H. H. Hahn.
Bloomfield	Knox		4	33.9		65	8	7	16†	48	T.		T.	T.	0	12	18	0	nw.	Dr. L. C. Bleick.
Bradshaw	York	1,715	11								0.40	− 0.79	0.40	0.0	1	14	15	1		E. C. Roggy.
Bridgeport	Morrill	3,658	14	37.2	+ 0.2	74	8	8	18	54	T.	− 0.40	T.	T.	0	14	12	4	nw.	R. H. Willis.
Brokenbow	Custer	2,477	15					9	12†		0.0	− 0.52	0.00	0.0	0	15	7	8		Chi., Burl. & Quincy R. R.
Burge	Cherry	2,674	4																	H. A. Davis.
Cairo	Hall	1,951	1								0.27		0.27	0.0	1					Elliott Harrison.
Callaway	Custer	2,555	17	39.3	+ 2.0	79	8	9	15	52	0.00	− 0.59	0.00	0.0	0	10	14	6	nw.	J. H. Evans.
Cambridge	Furnas	2,258	3	41.3		81	8	12	28	53	0.07		0.06	0.0	2	13	6	11	nw.	Chas. Jensen.
Canton (near)	Sioux		1																	A. E. Hann.
Columbus	Platte	1,442	17					14	16		0.25	− 0.51	0.25	T.	1	16	3	11	nw.	C. C. Gray.
Cozad	Dawson	2,496	2								0.05		0.05	0.0	1	18	9	3	w.	A. A. Luttin.
Creighton	Knox	1,600	13					9	16		0.03	− 0.80	0.02	0.0	2	7	18	5	n.	W. L. Kirk.
Crete	Saline	1,368	27	40.1	+ 1.4	75	8	15	28	41	0.10	− 0.82	0.10	0.0	1	17	9	4	n.	Doane College.
Culbertson	Hitchcock	2,565	23	41.1		75	8	15	5	50	T.	− 0.48	T.	0.0	0	16	1	13	nw.	J. H. Corrick.
Curtis	Frontier	2,553	13	40.0	+ 1.8	75	8	12	18	51	0.00	− 0.58	0.00	0.0	0	11	16	3	n.	Dr. S. R. Razee.
David City	Butler	1,619	21	38.6	+ 2.7	70	8	17	16†	36	0.23	− 0.75	0.20	0.5	2	13	10	7	nw.	S. Clingman.
Dawson	Richardson	945	17																	Mrs. E. I. Atkinson.
Dubois	Pawnee	1,074	5								0.18		0.18	0.0	1	22	5	3	nw.	O. M. Backus.
Ellis	Gage	1,430	5								0.10		0.10	0.0	1					D. J. Wood.
Elmcreek	Buffalo	2,268	2								0.17		0.17	0.0	1					E. L. Sutton.
Elsie	Perkins	3,382	2								0.05		0.05	T.	1					J. F. Brittain.
Enderslake	Brown		1																	G. W. Chappell.
Ewing	Holt	1,888	18	34.4		72	8	6	16	47	0.19	− 0.27	0.11	0.0	2					G. H. Benson.
Fairbury	Jefferson	1,316	35	40.4	+ 0.4	78	8	14	27†	44	0.12	− 0.86	0.12	0.0	1	15	15	0	nw.	W. F. Cramb.
Fairmont	Fillmore	1,641	17	37.4	− 0.4	75	8	17	5†	45	0.12	− 0.75	0.12	0.0	1	13	7	10	nw.	Chi.; Burl. & Quincy R. R.
Fort Robinson	Dawes	3,764	26	35.6	+ 0.2	70	25	9	18	52	0.38	− 0.02	0.17		4	15	5	10	w.	Post Hospital.
Franklin	Franklin	1,820	19					10	28		0.20	− 0.51	0.20	0.0	1	6	17	7	n.	Jesse H. Naden.
Fremont	Dodge	1,203	30	37.6	+ 0.9	71	8	13	16	44	0.10	− 0.98	0.10	0.0	1	12	9	9	nw.	Ernest Hahn.
Fullerton	Nance	1,629	8	37.1		77	7	15	28	46	0.44	− 0.66	0.25	T.	2	9	21	0	nw.	Dr. F. W. Johnson.
Geneva	Fillmore	1,633	20	39.6	+ 1.0	78	7	13	28	45	0.16	− 0.81	0.16	T.	1	16	7	7	nw.	F. M. Flory.
Genoa	Nance	1,584	35	37.5	+ 2.1	72	7	13	16	41	0.24	− 0.53	0.24	T.	1	13	14	3	n.	F. W. Parsons.
Gordon	Sheridan	3,550	8	33.6f		71	12	0	18	59f	0.00		0.00	0.0	0				nw.	G. F. Williams.
Gosper	Gosper		8								0.03		0.03	0.0	1	15	12	3	n.	E. H. Stoll.
Gothenburg	Dawson	2,557	16	39.0	+ 0.7	76	8	9	15	50	0.10	− 0.65	0.10	0.0	1	16	6	8	nw.	Dr. W. J. Bartholomew.
Grand Island	Hall	1,860	19	40.2	+ 2.7	80	7	18	9	44	0.25	− 0.52	0.25	0.0	1	11	9	10	nw.	E. A. Barnes.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Nebraska—Continued.																			
Grant	Perkins	3,405	7	37.4	.....	77	8	9	17	60e	0.13	.....	0.08	T.	2	18	7	5	nw.	Cyrus Carver.
Greeley	Greeley	2,021	15	36.7	.....	71	7	15	10	43	0.18	− 0.31	0.14	T.	2	16	12	2	se.	W. E. Morgan.
Guiderock	Webster	1,646	10	.....	.....	.....	.....	.....	.....	.....	0.30	− 0.69	0.25	0.0	2	15	7	8	n.	J. S. Marsh.
Haigler	Dundy	3,258	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chi., Burl. & Quincy R. R.
Halsey	Thomas	2,695	8	38.4	.....	73	8	16	28	49	0.29	.....	0.19	0.0	2	6	23	1	nw.	U. S. Forest Service.
Hartington	Cedar	1,309	19	33.6	− 0.3	62	8	10	16	42	0.20	− 0.89	0.20	0.0	1	8	12	10	nw.	D. E. Ewing.
Harvard	Clay	1,812	21	.....	.....	.....	.....	.....	.....	.....	0.34	− 0.37	0.34	0.0	1	18	10	2	nw.	Dr. J. T. Fleming.
Hastings	Adams	1,932	20	37.9	− 0.6	75	8	19	15†	43	0.33	− 0.41	0.33	0.0	1	25	5	0	nw.	Chi., Burl. & Quincy R. R.
Hayes Center	Hayes	.....	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. A. Ready.
Hay Springs	Sheridan	3,821	23	37.6	+ 4.2	71	25	3	18	52	T.	− 0.61	T.	T.	0	13	12	5	nw.	A. Kadlecek.
Hebron	Thayer	1,458	25	39.6	+ 0.4	73	22	13	28	42	0.13	− 1.10	0.13	0.0	1	.....	.....	.....	.....	Dr. C. M. Easton.
Hemingford	Boxbuttle	4,256	1	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.08	.....	3	.....	.....	.....	.....	A. S. Enyeart.
Hendley	Furnas	2,231	6	.....	.....	.....	.....	.....	.....	.....	0.02	.....	0.02	0.0	1	.....	.....	.....	.....	T. L. Jones.
Hillside	McPherson	.....	1	36.7	.....	75	8	0	18	57	0.06	.....	0.04	0.5	2	16	4	10	nw.	Mrs. M. R. Lloyd.
Holdredge	Phelps	2,324	18	39.6	+ 1.5	68	5†	15	15	47	0.23	− 0.45	0.23	0.0	1	11	14	5	nw.	Chi., Burl. & Quincy R. R.
Hooper	Dodge	1,228	13	36.1	− 1.3	71	8	12	15†	39	0.15	− 1.15	0.15	T.	1	15	3	12	nw.	Dr. W. Howard Heine.
Imperial	Chase	3,278	20	39.8	+ 2.1	79	8	10	18	53	T.	− 0.57	T.	T.	0	4	15	11	nw.	Robt. Malcolm.
Kearney	Buffalo	2,146	20	40.2	+ 1.4	80	8	10	15	52	0.30	− 0.32	0.30	0.0	1	17	8	5	sw.	N. C. Dunlap.
Kimball	Kimball	4,697	21	39.6	+ 3.5	75	10†	10	26	46	0.10	− 0.31	0.10	1.0	1	12	15	3	nw.	F. J. Bellows.
Kirkwood	Rock	.....	15	36.4	+ 1.9	73	8	10	16	43	0.19	− 0.43	0.19	T.	1	15	13	2	nw.	Mrs. C. Arter.
Kowanda	Deuel	.....	2	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.10	0.0	3	.....	.....	.....	.....	Geo. W. Hulse.
Lexington	Dawson	2,385	21	37.1	− 0.1	71	7	7	15	47	0.10	− 0.46	0.10	0.0	1	25	0	5	se.	Robt. Chadwick.
Lincoln	Lancaster	1,189	31	39.0	+ 1.0	76	8	18	30	38	0.10	− 0.75	0.05	0.3	4	11	10	9	n.	U. S. Weather Bureau.
Lodgepole	Cheyenne	3,820	12	40.0	+ 3.7	76	25	11	5	54	0.05	− 0.14	0.05	0.5	1	15	11	4	nw.	R. T. Kidney.
Loup	Sherman	2,067	16	36.6	− 0.3	75	8	8	30	45	0.38	− 0.22	0.38	0.0	1	21	7	2	n.	E. S. Hayhurst.
Loyal	Custer	.....	2	.....	.....	.....	.....	.....	.....	.....	0.26	.....	0.26	0.0	1	15	9	6	s.	C. H. Cass.
McCook	Redwillow	2,506	15	.....	.....	80	8	.....	.....	.....	0.00	− 0.63	0.00	0.0	0	20	7	3	n.	C. G. Coglizer.
McCool Junction	York	1,575	12	.....	.....	.....	.....	.....	.....	.....	0.31	− 0.82	0.31	0.0	1	.....	.....	.....	.....	L. L. Slagle.
Madison	Madison	1,585	17	36.0	− 0.2	68	8	12	16	38	T.	− 0.88	T.	T.	0	14	9	7	nw.	Dr. F. A. Long.
Marquette	Hamilton	1,830	31	.....	.....	.....	.....	.....	.....	.....	0.30	− 0.41	0.30	T.	1	.....	.....	.....	.....	John Ellis.
Mason City	Custer	2,257	9	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.15	0.0	1	.....	.....	.....	.....	J. A. Amsberry.
Minatare	Scottsbluff	3,825	1	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	19	1	10	w.	Anthony Kennedy.
Minden	Kearney	2,169	33	38.6	+ 1.4	76	8	12	15	43	0.35	− 0.59	0.33	T.	2	9	16	5	.....	Joel Hull.
Mitchell (near)	Scottsbluff	.....	3	38.6	.....	74	11	8	20	48	0.05	.....	0.05	T.	1	19	6	5	nw.	U. S. Reclamation Service.
Morrill	do.	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Edwin K. Wieland, jr.
Nebraska City	Otoe	941	33	38.3	− 0.5	68	26	13	19	44	T.	− 1.06	T.	0.0	0	16	13	1	s.	Chi., Burl. & Quincy R. R.
Norfolk	Madison	1,532	27	36.1	+ 1.7	71	8	8	16	43	0.35	− 0.39	0.26	T.	3	20	7	3	nw.	Dr. P. H. Salter.
North Loup	Valley	1,961	22	37.4	+ 1.1	77	8	10	10	48	0.08	− 0.47	0.08	T.	1	13	17	0	n.	W. G. Rood.
North Platte	Lincoln	2,841	36	37.8	+ 2.7	73	8	11	18	47	0.11	− 0.29	0.11	T.	1	13	12	5	w.	U. S. Weather Bureau.
Oakdale	Antelope	1,722	23	33.2	− 0.8	68	8	5	16	42	0.26	− 0.41	0.18	0.1	3	12	14	4	nw.	G. S. Clingman.
Odell	Gage	1,278	16	.....	.....	.....	.....	.....	.....	.....	0.10	− 1.23	0.10	0.0	1	8	14	8	.....	Chi., Burl. & Quincy R. R.
Omaha	Douglas	1,103	40	38.2	+ 0.5	69	8	18	30	35	0.17	− 0.89	0.11	0.0	2	8	13	9	nw.	U. S. Weather Bureau.
Ord	Valley	2,062	16	.....	.....	.....	.....	.....	.....	.....	0.20	− 0.40	0.20	0.0	1	6	22	2	n.	James Milford.
Orleans	Harlan	1,993	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James McGeachin.
Osceola	Polk	1,644	12	37.6	.....	61	8	16	16	38e	0.40	− 0.42	0.40	0.0	1	.....	.....	.....	nw.	G. T. Ray.
Palisade	Hitchcock	.....	1	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	E. E. Young.
Palmyra	Otoe	1,142	15	38.2	− 1.4	76	8	16	19	.....	0.17	− 1.25	0.10	T.	2	19	10	1	n.	Thomas Coles.
Pawnee City	Pawnee	1,175	.....	39.6	.....	78	7	11	19	52	0.15	− 1.75	0.15	T.	1	25	3	2	n.	Frank A. Barton.
Paxton	Keith	.....	1	.....	.....	.....	.....	.....	.....	.....	0.02	.....	0.02	T.	1	.....	.....	.....	.....	H. D. Lute.
Plymouth	Jefferson	1,419	6	38.3	.....	77	8	14	28	44	0.08	.....	0.08	0.0	1	6	17	7	nw.	John Ruppel.
Purdum	Blaine	.....	10	37.0	.....	74	8	11	28	48	0.26	.....	0.13	T.	4	13	12	5	nw.	T. C. Jackson.
Ravenna	Buffalo	2,028	33	38.6	+ 1.4	78	8	13	15†	49	0.23	− 0.40	0.23	0.0	1	18	11	1	nw.	H. G. Smith.
Redcloud	Webster	1,687	18	40.8	+ 1.8	77	8	12	15†	49	0.29	− 0.50	0.26	T.	2	19	5	6	nw.	Chas. S. Ludlow.
St. Libory	Howard	1,887	15	.....	.....	.....	.....	.....	.....	.....	0.26	− 0.55	0.26	0.0	1	17	11	2	nw.	W. I. Meader.
St. Paul	do	1,796	16	39.4	+ 0.7	75	8	17	19	42	0.21	− 0.60	0.21	0.0	1	20	10	0	nw.	Paul Anderson.
Santee	Knox	.....	22	36.6	+ 1.2	65	12	0	30	47	0.00	− 0.89	0.00	0.0	0	18	12	0	se.	Nat H. Neff.
Sargent	Custer	2,339	13	36.6	.....	74	8	8	15	47b	T.	− 0.54	T.	0.0	0	27	0	3	nw.	Jas. L. Ferguson.
Schuyler	Colfax	1,357	17	37.0	.....	72	7	11	16	45	0.22	− 0.63	0.22	0.0	1	14	11	5	n.	John T. Sumner.
Scottsbluff	Scottsbluff	3,888	4	39.4	.....	73	8†	10	18	50	0.03	.....	0.02	T.	2	16	8	6	nw.	A. B. McCoskey.
Seward	Seward	1,435	20	37.6	− 1.3	72	6	10	30	45	0.35	− 0.74	0.30	0.5	2	17	10	3	nw.	Chi., Burl. & Quincy R. R.
Sheridan	Wheeler	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. C. Harris.
Sidney	Cheyenne	4,090	18	.....	.....	.....	.....	.....	.....	.....	0.15	− 0.13	0.10	1.0	2	26	4	0	nw.	John P. Fischer.
Springview	Keyapaha	.....	17	34.8	− 0.5	72	8	10	16†	43	0.12	− 0.32	0.07	T.	2	7	13	10	nw.	C. L. Phelps.
Stanton	Stanton	1,472	19	35.0	− 0.5	70	8	8	16	41	0.25	− 0.65	0.15	0.0	2	14	16	0	s.	Alfred Pont.
Stratton	Hitchcock	2,804	15	.....	.....	.....	.....	.....	.....	.....	0.30	− 0.47	0.30	0.0	1	.....	.....	.....	.....	Miss Stella Vennum.
Superior	Nuckolls	1,574	25	.....	.....	.....	.....	.....	.....	.....	0.20	− 0.66	0.20	0.0	1	.....	.....	.....	.....	F. V. Bishop.
Tablerock	Pawnee	1,023	22	.....	.....	.....	.....	.....	.....	.....	0.22	− 1.36	0.12	0.5	3	22	6	2	nw.	E. D. Howe.
Tecumseh	Johnson	1,113	32	.....	.....	.....	.....	.....	.....	.....	0.18	− 1.05	0.12	T.	2	10	16	4	.....	Chi., Burl. & Quincy R. R.
Tekamah	Burt	1,060	20	36.2	− 1.3	67	7†	12	30	41	0.13	− 1.12	0.08	T.	2	5	20	5	nw.	Dr. A. D. Nesbit.
Tobias	Saline	1,597	1	.....	.....	.....	.....	13	30	.....	T.	.....	T.	0.0	0	15	9	6	n.	Frank Ainsworth.
Turlington	Otoe	1,214	18	39.6	+ 0.8	75	8	17	19	41	0.21	− 1.04	0.14	T.	2	20	6	4	nw.	Wm. N. Hunter.
University Farm	Lancaster	.....	25	39.6	.....	76	8	17	30	43	0.18	− 0.86	0.13	T.	2	16	11	3	.....	S. W. Perin.
Valentine	Cherry	2,613	22	34.6	+ 0.9	72	25	7	30	49	0.12	− 0.61	0.05	0.2	3	17	11	2	nw.	U. S. Weather Bureau.
Wahoo	Saunders	1,187	8	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	0.0	1	26	3	1	sw.	W. T. Mauck.
Wakefield	Dixon	1,387	16	34.8	− 1.9	68	8	8	16	44	0.18	− 0.82	0.15	T.	2	17	10	3	nw.	I. H. Weaver.
Walthill	Thurston	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. L. Keefe.
Watertown	Buffalo	2,290	5	.....	.....	.....	.....	.....	.....	.....	0.22	.....	0.22	0.0	1	8	21	1	nw.	R. E. Swift.
Wauneta	Chase	.....	11	.....	.....	.....	.....	.....	.....	.....	0.10	− 0.68	0.10	0.0	1	.....	.....	.....	.....	C. D. Fuller.
Weepingwater	Cass	1,080	33	38.7	.....	75	8	14	19	42	0.19	− 1.12	0.11	0.0	2	23	2	5	nw.	S. W. Orton.
Wellfleet (near)	Lincoln	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Eli Votaw.
Westpoint	Cuming	1,313	24	38.0	− 0.6	71	7	11	30	41	0.25	− 0.80	0.25	T.	1	21	6	3	n.	J. C. Elliott.
Wisner	do	1,380	14	.....	.....	.....	.....	.....	.....	.....	0.18	− 1.04	0.11	0.0	2	26	1	3	.....	F. C. Evans.
Woodlawn	Lancaster	.....	5	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.08	0.8	1	13	13	4	nw.	H. C. Kendall.
York	York	1,633	21	39.4	+ 1.0	76	8	16	28†	44	0.30	− 0.52	0.30	0.0	1	20	7	3	nw.	A. T. Glauque.
Iowa.																				
Afton §	Union	1,212	16	36.8	0.0	63	7	15	30	32	0.63	− 0.60	0.43	T.	3	.....	.....	.....	nw.	N. W. Rowell.
Allerton §	Wayne	1,513	8	37.0e	− 3.6	67	8	14	17	43e	.....	.....	.....	T.	.....	.....	.....	.....	nw.	Mrs. Geo. Shriver.
Alton	Sioux	1,305	5	32.2	.....	57	8	9	30	37	0.15	.....	0.10	1.0	3	14	11	5	nw.	W. S. Slagle.
Atlantic	Cass	1,164	19	35.4	0.0	64	7†	15	16†	37	0.39	− 0.59	0.17	T.	3	5	6	19	nw.	Thos. H. Whitney.
Audubon §	Audubon	1,301	16	34.9	− 0.3	63	7	13	30	33	0.41	− 0.93	0.21	1.0	3	15	8	7	nw.	Geo. E. Kellogg.
Bedford §	Taylor	.....	10	37.0	+ 1.6	68	7	11	9	49	0.35	− 0.94	0.25	T.	2	16	9	5	nw.	E. E. Healy.
Centerville	Appanoose	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.25	T.	1	24	3	3	w.	Gordon Peacock.
Chariton §	Lucas	1,042	15	36.0	− 2.7	66	7	12	17	38	T.	− 1.30	T.	T.	0	16	0	14	n.	C. C. Burr.
Clarinda	Page	1,000	20	33.8	− 4.0	66	8	11	19	41	0.36	− 0.80	0.26	T.	3	15	6	9	nw.	A. S. Van Sandt.
Corning §	Adams	1,117	18	36.1	− 1.1	65	7	10	16	36	0.39	− 0.81	0.37	T.	2	.....	.....	.....	nw.	Jerome Smith.
Corydon §	Wayne	1,101	17	35.4	− 3.3	67	7	14	30	37	0.31	− 1.14	0.16	T.	2	15	9	6	nw.	Clara Miller.
Council Bluffs	Pottawattamie	.....	.....	38.4	.....	76	8	11	29	54	0.11	.....	0.11	0.0	1	15	6	9	nw.	B. W. Crosley.
Creston	Union	1,312	5	34.6	.....	65	7	13	30	35	0.61	.....	0.41	T.	4	8	9	13	nw.	O. J. Colby.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Iowa—Continued.																			
Cumberland	Cass		10								1.03	+ 0.05	1.02	0.0	2	20	9	1	s.	J. H. Reppert.
Denison	Crawford	1,180	16	34.3	− 1.3	62	7	11	29	37	T.	− 1.01	T.	0.0	0	19	9	2	n.	W. C. Van Ness.
Elliott	Montgomery		5	36.8		67	7†	13	16	40	0.42		0.42	0.0	F	15	12	3	nw.	Henry Barnes.
Greenfield	Adair	1,113	18	34.1	− 2.5	62	7	13	16†	33	0.70	− 0.47	0.52	0.0	3	13	14	3	nw.	R. B. Oldham.
Harlan §	Shelby	1,192	11	34.7	− 2.5	64	7	12	16	37	0.17	− 0.87	0.07	T.	3	8	15	7	nw.	C. A. Reynolds.
Hopeville	Clarke		19	36.0	− 0.7	67	7	13	15	36	0.58	− 0.51	0.38	T.	3	4	20	6	nw.	M. T. Ashley.
Inwood §	Lyon	1,474	6	31.3		58	7	6	28†	40	0.09		0.05	0.5	2	17	6	7	nw.	F. B. Hanson.
Lamoni	Decatur		3	37.0		63	8	15	30	37	0.31		0.22	0.0	2	15	0	15	nw.	T. J. Fitzpatrick.
Larrabee	Cherokee	1,266	20	31.8	− 1.1	57	1†	8	11†	34	0.19	− 0.83	0.15	0.4	3	15	11	4	nw.	H. B. Strever.
Le Mars §	Plymouth	1,224	14	33.4	− 1.1	67	1	10	29†	33	0.16	− 1.07	0.16	T.	1	6	22	2	nw.	G. A. C. Clarke.
Lenox §	Taylor	1,250	15	36.4	− 1.5	65	7	14	16†	34	0.13	− 1.09	0.10	0.3	2	21	5	4	nw.	J. L. Hurley.
Leon	Decatur	1,120	8	36.5		68	2	14	18	45	0.10		0.10	T.	1	15	4	11	nw.	Morris Gardner.
Little Sioux §	Harrison		5	36.4		67	7	9	30	38	0.32		0.11	0.0	4	12	10	8	nw.	Geo. H. Gibson.
Logan §	do	928	43	36.8	+ 0.9	74	27	15	16†	48	0.06	− 1.19	0.04	T.	2	5	21	4	nw.	Glenn H. Stern.
Massena §	Cass		4																	C. E. Smeltzer.
Mount Ayr §	Ringgold	1,236	17	37.8	− 1.1	69	7	15	30	37	0.47	− 0.89	0.17	T.	3	11	6	13	nw.	A. F. Beard.
Odebolt §	Sac	1,356	13	34.4	− 2.1	62	7	11	30	37	0.08	− 1.06	0.08	0.0	1	23	5	2		E. Starner.
Onawa §	Monona	1,051	10	37.2	− 1.1	63	7	15	30	35	0.21	− 1.27	0.08	T.	4	21	7	2	nw.	C. G. Perkins.
Pacific Junction §	Mills	960	11	36.4	− 2.7	67	7	14	16	40	0.32	− 0.62	0.24	T.	2	14	13	3	n.	H. H. McCartney.
Rock Rapids §	Lyon	1,358	11	31.0	− 0.9	56	8	12	30	35	0.05	− 1.01	0.05	0.5	1					W. C. Wyckoff.
Sheldon §	O'Brien	1,422	10	31.3	− 4.8	55	2†	8	30	40	0.20	− 0.88	0.15	T.	2	14	13	3	n.	Dr. A. W. Beach.
Sibley	Osceola	1,212	17	29.6	− 2.4	54	6†	8	30	38	0.13	− 0.86	0.10	0.5	2				nw.	H. G. Doolittle.
Sioux Center §	Sioux		11	31.5	− 3.8	54	7	8	30	31	0.07	− 0.64	0.05	0.5	2	14	9	7	nw.	J. de Ruyter.
Sioux City	Woodbury	1,135	21	33.8	− 0.5	60	7	12	30	34	0.15	− 0.82	0.11	T.	2	13	12	5	nw.	U. S. Weather Bureau.
Thurman §	Fremont		13	38.0	− 0.6	70	8	14	19	38	0.38	− 0.92	0.30	T.	2	7	16	7	nw.	C. R. Paul.
Washta §	Cherokee	1,157	12	33.6		62	7	7	29	42	0.15	− 0.82	0.10	T.	2	19	8	3	n.	H. L. Felter.
Woodburn §	Clarke	961	11	34.6		69	7	9	3†	46	0.69	− 0.55	0.37	2.6	3	11	11	8	nw.	C. B. McDonough.
Kansas.																				
Abilene	Dickinson	1,157	15								0.16	− 0.84	0.16	T.	1	3	25	2	ne.	T. W. Sherman.
Agricultural College	Riley	1,100	52	41.3	− 0.4	80	26	14	28	51	0.20	− 1.11	0.20	T.	1	22	4	4	w.	Prof. J. O. Hamilton.
Alton	Osborne	1,651	8	41.6		80	8	10	28	52	0.06	− 0.99	0.06	T.	1	16	13	1	n.	H. A. Storer.
Atchison	Atchison	973	19	42.2	+ 0.4	76	8	17	30	39	0.30	− 0.97	0.30	T.	1	23	4	3	w.	Prof. M. F. Troxell.
Baker	Brown	1,182	10	41.6		74	8	10	30	44	0.00		0.00	0.0	0	13	0	17		E. A. Bastien.
Beloit	Mitchell	1,383	15																	W. H. Houghton.
Blakeman	Rawlins	2,894	13	40.0		80	8	10	18†	62	T.	− 0.54	T.	T.	0	22	1	7	nw.	C. L. Henderson.
Blue Rapids	Marshall	1,105	4																	M. Norton.
Centralia	Nemaha	1,256	1	40.4		78	26	16	28†	42	0.18		0.18		1	24	2	4	nw.	L. E. Hazen.
Chapman	Dickinson	1,113	6	43.7		79	26	13	28	46	0.15		0.15	T.	1	20	4	6	n.	Dr. R. McShea.
Clay Center	Clay	1,203	9	42.3		78	7†	10	28	53	0.21		0.21	0.0	1	14	8	8	s.	O. L. Slade.
Colby	Thomas	3,138	19	43.0	+ 3.4	78	8	11	28	48	T.	− 0.51	T.	T.	0	14	13	3	sw.	R. M. Chelf.
Concordia	Cloud	1,398	26	41.4	+ 1.5	79	8	15	28	46	0.15	− 0.79	0.15	T.	2	4	22	4	n.	U. S. Weather Bureau.
Densmore	Norton	2,200	1	42.1		84	8	6	28	56	T.		T.	T.	0	8	22	0	sw.	F. S. Griffith.
Dresden	Decatur	2,731	16	42.6	+ 0.9	79	8	16	18†	49	0.02	− 0.56	0.02	T.	1	17	6	7	se.	Jacob Bock.
Ellsworth	Ellsworth	1,537	6	42.6		79	8	8	28	53	T.		T.	0.0	0	13	12	5	s.	Geo. Seitz.
Enterprise	Dickinson	1,144	8	43.4		81	26	12	28	47	0.13	− 0.87	0.13	T.	1	11	9	2	nw.	H. O. Wagner.
Eskridge	Wabaunsee	1,412	4	43.0		77	26	16	28†	35	0.24		0.24	T.	1	20	6	4	n.	Geo. D. West.
Farnsworth	Lane	2,850	9	45.2		82	8	17	10	61	T.		T.	T.	0	16	9	2	s.	C. M. Jennison.
Fort Scott	Bourbon	857	35	45.8	− 0.3	75	8	19	28	42	0.18	− 2.32	0.18	T.	1	28	0	2	nw.	E. A. Shaver.
Frankfort	Marshall	1,146	16	41.6	− 0.2	79	8	11	28	45	0.05	− 1.16	0.05	T.	1	14	15	1	nw.	E. C. Dunham.
Garnett	Anderson	950	4	44.7		72	8	18	28	46	0.12		0.12	0.0	1	13	12	5	n.	D. D. Judy.
Goodland	Sherman	3,687	3	43.5		82	24	12	20	56	0.10		0.10	1.0	1	23	2	5	s.	G. C. Calvert.
Gove	Gove	2,750	21	43.3	+ 3.5	83	8	9	28	55	T.	− 0.59	T.	T.	0	20	10	0	se.	Jesse Royer.
Hanover	Washington	1,225	13	42.0		77	8	14	28	44	0.15	− 0.82	0.15	0.0	1	20	6	4	n.	August Jaedicke, jr.
Harrison	Jewell	1,804	9	40.4		78	8	12	28	51	0.22		0.21	0.0	2	18	8	4	n.	Mahlon Tegley.
Hays	Ellis	2,000	42	42.7	+ 2.3	80	8	9	28	50	T.	− 0.72	T.	T.	0	15	15	0	ne.	G. K. Helder.
Hill City	Graham	2,134	2	42.8		79	8	12	28	52	T.		T.	T.	0					I. R. Mort.
Horton	Brown	1,188	21	41.6	+ 0.3	75	26	18	28†	42	0.20	− 1.02	0.20	T.	1	18	8	4	nw.	Mrs. S. C. Belden.
Hoxie	Sheridan	2,700	12																	C. T. Dallam.
Jewell	Jewell	1,540	5	41.7		80	8	8	28	55	0.10		0.10	T.	1	21	6	3	s.	C. A. Shinn.
Lawrence	Douglas	997	42	42.8	+ 1.2	74	8	19	30	36	0.26	− 1.57	0.26	T.	1	12	6	12	nw.	Prof. H. P. Cady.
Lebanon	Smith	1,812	12								0.04	− 0.85	0.04	T.	1	22	5	3	s.	Earl V. Bower.
Lindsborg	McPherson	1,333	4																	N. S. Weddle.
Mankato	Jewell	1,784	1	41.4		72	7	16	30	43	0.14		0.14	T.	1	18	12	0	n.	R. M. Cauthorn.
Minneapolis	Ottawa	1,259	20	42.6	+ 1.8	78	8	11	28	49	0.10	− 0.66	0.10	T.	1	18	7	5	s.	J. L. Steele.
Moran	Allen	1,098	14	47.0	+ 1.3	76	8	15	28	38	T.	− 1.34	T.	0.0	0	21	5	4	sw.	C. J. Norton.
Natoma	Osborne	1,834	1								0.0		0.0	0.0	0	27	1	2	s.	C. O. Hunt.
Norton	Norton	2,284	12	41.6	+ 0.7	78	8	14	28†	50	T.	− 0.46	T.	T.	0	15	13	2	se.	Sim Sieffel.
Oberlin	Decatur	2,539	23								0.05	− 0.58	0.05	T.	1	23	7	0	nw.	I. K. Huber.
Oketo	Marshall	1,194	2	41.6		78	8	15	28	47	0.18		0.18	0.0	2	2	25	3	nw.	J. A. Church.
Olathe	Johnson	1,032	15	43.1	− 1.6	75	8	17	30	38	0.20	− 1.71	0.17	T.	2	18	7	5	nw.	Dr. S. B. S. Wilson.
Osage City	Osage	1,081	11	43.4		77	8	15	28	46	0.14	− 1.73	0.14	T.	1	20	2	4	n.	W. C. White.
Ottawa	Franklin	926	16	43.4	0	77	8	17	19†	44	0.15	− 1.54	0.15		1	6	21	3	s.	Herbert F. McDougal.
Phillipsburg	Phillips	1,939	19	42.3	+ 2.3	79	8	13	28	48	0.08	− 0.48	0.08	T.	1	20	9	1	ne.	N. E. Bailey.
Pleasanton	Linn	862	8	43.2		73	8	18	30	39	0.11		0.11	0.0	1	18	7	5	ne.	B. F. Blaker.
Russell	Russell	1,834	11	44.0	+ 1.5	80	8	10	28	51	0	− 0.91	0	0.0	0	19	6	5	n.	Robert Brebner.
Russell Springs	Logan		1	40.4		76	26	8	28	47	0.06		0.06	T.	1	15	12	3	ne.	D. J. Hutto.
St. Francis	Cheyenne	3,288	2	42.0		84	25	11	28	62	0.02		0.02	0.5	1	8	17	5	s.	J. E. Uplinger.
Salina	Saline	1,227	26	42.8	− 0.4	76	26	11	28	45	0.09	− 0.68	0.09	T.	1	20	10	0	s.	Prof. A. W. Jones.
Scott	Scott	2,971	4	45.0		81	8	10	28	51	0.03		0.03	0.8	1	14	12	4	s.	J. P. Loughran.
Smith Center	Smith	1,800									0.31		0.31	0.0	1	14	16	0	se.	W. H. Nelson.
Topeka	Shawnee	997	24	43.4	+ 1.7	75	8	20	28	35	0.25	− 1.01	0.25	T.	1	19	9	2	nw.	U. S. Weather Bureau.
Valley Falls	Jefferson	913	11	42.5	+ 1.4	76	8	17	28	41	0.30	− 1.24	0.30	T.	1	23	5	2	nw.	Miss Nettie Maxwell.
Vinland	Douglas	880	1	42.9		75	8	15	19	42	0.16		0.16	T.	1	15	10	5	n.	A. Schick.
Wakeeney	Trego	2,456	27	43.6	+ 2.9	82	8	11	28	50	T.	− 0.67	T.	T.	0	23	3	4	nw.	A. S. Peacock.
Wallace	Wallace	3,303	40	43.9		84	25	10	28	57	0.07	− 0.40	0.07	0.5	1	1	27	2	sw.	M. T. Griggs.
Wamego	Pottawatomie	1,002	17								0.20	− 1.00	0.20	0.0	1	15	9	6	n.	M. L. Stone.
Missouri.																				
Amoret	Bates	850	1	44.8		75	8	17	30	41	0.15		0.15	T.	1	18	5	7	ne.	Darby Fruit Farm.
Appleton City	St. Clair	853	20	44.4	− 1.0	77	8	17	30	46	0.19	− 2.25	0.11	0.2	3	9	18	3	n.	T. C. Brown.
Arlington	Phelps	695	20																	George V. Randolph.
Arthur	Vernon	767	18	44.2	− 0.3	75	22	17	30	45	0.08	− 2.02	0.08	0.0	1	17	13	0	nw.	J. T. Armstrong.
Avalon	Livingston		25	40.2	− 3.7	73	7	15	30	42	0.27	− 1.97	0.19	T.	2	24	5	1	nw.	F. G. Ashbaugh.
Bagnell	Miller	594	15																	W. S. Brockman.
Bethany	Harrison	881	20	38.2	− 1.3	70	1	13	16	37	0.25	− 1.41	0.25	0.0	1	19	9	2	nw.	W. H. Skinner.
Bolivar	Polk	1,070	22	44.8	− 1.9	81	8	17	19	46	0.19	− 2.67	0.10	T.	3	18	8	4	sw.	E. Waltz.
Boonville	Cooper	600	34								0.28	− 2.15	0.20	0.0	2	14	6	10	se.	C. Randecker.
Brunswick §§	Chariton	652	32	40.4	− 1.4	71	9	18	30	39	0.27	− 1.76	0.27	0.0	1	12	5	13	nw.	Louis Benecke.
Clinton	Henry	800	24	44.0		77	8	16	30	40	0.33	− 1.67	0.15	1.5	4	21	8	1	nw.	Dr. G. W. Menees.

TABLE 1.—*Climatological data for November, 1910. District No. 6*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Missouri—Continued.																		
Columbia	Boone	784	21	40.6	− 1.8	75	9	19	17	37	0.33	− 1.98	0.19	0.0	3	17	7	6	nw.	U. S. Weather Bureau.
Conception§	Nodaway	982	26	39.7	− 1.3	71	7	12	19	41	0.15	− 1.23	0.15	0.0	1	5	15	10	nw.	Fr. Adhelm Hess.
Eldorado Springs	Cedar	750	5	45.6	.....	78	8	18	28†	46	0.15	.....	0.15	0.0	1	16	6	8	n.	Samuel Graham.
Fairport	Dekalb	920	16	.....	.....	.....	.....	.....	.....	.....	0.15	− 1.47	0.15	T.	1	23	3	4	sw.	J. W. Lincoln.
Fayette§	Howard	725	27	40.7	− 2.2	70	9	19	17†	37	0.31	− 1.80	0.20	T.	3	20[f]	0[f]	4[f]	.....	Prof. T. Berry Smith.
Fulton	Callaway	818	19	41.0	− 4.3	70	1†	16	17	37	0.44	− 1.92	0.20	0.0	4	7	20	3	nw.	Dr. J. L. Brenneman.
Glasgow	Howard	618	33	.....	.....	.....	.....	.....	.....	.....	0.03	− 1.87	0.02	0.0	2	16	7	7	e.	J. J. Shaughnessy.
Grant City	Worth	1,130	18	39.1	.....	71	7	15	16	42	0.36	− 1.13	0.21	T.	2	15	8	7	nw.	W. H. Campbell.
Harrisonville	Cass	912	38	40.0	− 2.0	73	8	20	30	40	0.25	− 1.97	0.15	1.5	3	7	8	15	w.	A. J. Sharp.
Hazelhurst	Livingston	.....	17	.....	.....	.....	.....	.....	.....	.....	0.23	− 1.55	0.18	0.5	2	.....	.....	.....	.....	W. H. Baker.
Hermann	Gasconade	482	36	.....	.....	.....	.....	.....	.....	.....	0.38	− 2.54	0.18	0.0	3	14	6	10	e.	C. T. Maushund.
Houston	Texas	1,280	18	44.0	− 2.1	76	9	16	3	47	0.50	− 2.24	0.30	1.0	2	13	13	4	s.	E. Dempsey.
Huntsville	Randolph	790	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. H. Hammitt.
Jefferson City §§	Cole	628	29	39.6	− 4.7	75	9	18	17†	44	0.70	− 1.62	0.30	0.0	5	20	1	9	n.	Miss Emma Swift.
Kansas City	Jackson	963	21	43.8	+ 2.3	73	8	21	30	31	0.28	− 1.57	0.25	0.2	2	9	17	4	nw.	U. S. Weather Bureau.
Kidder §§	Caldwell	1,017	20	41.0	− 0.5	70	7	17	19†	36	0.22	− 1.56	0.22	0.0	1	17	2	11	nw.	J. F. Sharp.
Lamonte	Pettis	863	22	42.4	.....	74	8	18	28†	43	0.17	− 1.85	0.17	T.	1	21	3	6	nw.	J. R. Wade.
Lebanon	Laclede	1,265	22	45.6	− 0.4	74	9	22	17	36	0.35	− 2.29	0.17	1.0	4	13	10	7	nw.	M. W. Seri.
Lexington §§	Lafayette	813	28	43.0	− 0.5	72	8	19	30	39	0.13	− 1.86	0.13	0.0	1	22	0	8	n.	J. W. Keithley.
Liberty	Clay	864	22	45.2[e]	+ 2.4	74	8	20[e]	28	40	0.36	− 1.42	0.36	T.	1	18[e]	5[e]	1[e]	ne.	W. C. Wilmott.
Lockwood	Dade	1,088	16	47.0	.....	74	8†	18	28†	36	0.08	− 2.15	0.08	T.	1	23	5	2	nw.	C. S. Crow.
Marshall	Saline	779	20	41.8	− 1.0	71	26	19	30	36	0.26	− 1.96	0.15	T.	3	17	8	5	nw.	Dr. W. H. Black.
Marshfield	Webster	1,492	2	48.4	.....	75	9	21	3	35	0.20	.....	0.10	T.	2	16[f]	6	8	nw.	Dr. O. P. Keller.
Maryville §§	Nodaway	1,160	20	36.9	− 2.0	68	8	17	19†	41	0.19	− 1.30	0.19	0.0	1	16	3	11	n.	J. R. Brink.
Mount Vernon	Lawrence	1,480	34	47.6	+ 0.3	78	13†	20	28†	41	0.05	− 2.89	0.05	0.0	1	23	5	2	sw.	O. L. White.
Nevada	Vernon	860	16	.....	.....	.....	.....	.....	.....	.....	0.10	− 1.97	0.10	0.0	1	25	5	0	nw.	C. Jewell.
Oregon	Holt	1,113	55	38.3	− 2.3	72	8	12	30	39	0.20	− 1.51	0.20	T.	1	18	5	7	nw.	Tom Curry.
Osceola	St. Clair	738	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. E. Matthews.
Pattonsburg	Davies	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.24	.....	0.22	0.0	2	14	6	10	nw.	Wm. Burton.
Rolla	Phelps	1,092	29	44.2	.....	74	9†	18	30	36	0.32	− 2.28	0.18	0.6	3	20	5	5	nw.	Prof. P. J. Wilkins.
St. Charles	St. Charles	614	32	41.8	− 3.1	77	9	19	17†	39	0.14	− 2.71	0.14	0.0	1	14[a]	6[a]	9[a]	nw.	L. C. Saeger.
St. Joseph	Buchanan	825	39	41.0	.....	73	8	20	30	37	0.20	− 1.63	0.20	T.	1	8	17	5	nw.	U. S. Weather Bureau.
St. Louis	St. Louis	567	39	42.0	− 1.4	73	9	21	30	31	0.30	− 2.58	0.28	0.0	3	14	6	10	nw.	Do.
Sublett	Adair	1,000	30	38.2	− 2.6	69	7†	11	29	43	T.	− 1.84	T.	0.0	0	14	9	7	nw.	Lewis Spriggs.
Trenton	Grundy	812	15	39.2	− 3.0	66	7	12	16	37	0.36	− 1.43	0.36	T.	1	14	10	6	n.	W. H. Estes.
Unionville §§	Putnam	1,072	17	36.4	− 3.4	70	7	14	17†	40	0.59	− 1.26	0.40	T.	3	14	8	8	n.	Geo. W. Davis.
Warrensburg	Johnson	883	32	44.4	0.0	73	8	19	30	40	0.15	− 1.60	0.15	T.	1	21	8	1	nw.	A. F. Smithson.
Warrenton §§	Warren	865	20	39.0	− 3.8	68	1	19	30	37	0.79	− 2.00	0.45	T.	4	9	9	12	n.	Dr. John H. Frick.
Warsaw	Benton	700	6	45.0	.....	82	9	14	30	53	0.75	.....	0.27	2.8	4	20	7	3	nw.	Dr. J. R. Smith.
Wheatland	Hickory	920	18	.....	.....	.....	.....	.....	.....	.....	0.35	− 2.38	0.10	1.0	4	19	8	3	s.	Mrs. S. A. Jackson.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
| Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 6, Missouri Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Barnum	Powder	.60		T.										.07						T.				T.								0.67
Basin	Big Horn																										.07					0.07
Bennett	North Platte																															
Big Creek Station	...do																															
Burris	South Platte																															
Caspar	North Platte														T.	.08	T.	T.		T.	T.						.15			.02		0.29
Cheyenne	South Platte	T.		.04												T.				.10					.10			T.		T.		0.39
Chugwater	North Platte	.19			T.									.10										T.	.09		.08		T.	T.	T.	0.81
Clark	Clark's Fork	.12		T.						.42																						
Cody	Big Horn																															
Crystal Lake	South Platte																															
Dome Lake	Tongue	.40		.30					.05	.65				.20					.20	.10	.10		.40	.20			.10		.50			3.20
Douglas	North Platte	.05		T.															.05	.04				.05						.02		0.21
Dubois	Big Horn																						T.	T.	T.	.05			T.			0.05
Eaton's Ranch	Tongue			.20										.10										T.			.05				.20	0.55
Echeta	Powder	.25		.10	T.					.10				T.					T.		T.					.03						0.48
Elk Mountain	North Platte																			.06							.05					0.11
Encampment	...do			T.												.01		T.						.14			T.					0.15
Ervay	...do	.03		T.	T.					T.			T.					T.		T.	T.						.03					0.06
Fort Laramie	...do																													T.	T.	T.
Fox Creek Station	...do																															
Gillette	Powder	T.								.10										T.		T.			.20					T.		0.30
Hunters' Station	...do	.26		.12	.08				T.	.22				.08					.08				T.				.12		T.	.11		1.07
Hyattville	Big Horn																															
Jireh	Niobrara	.20		T.						.05										.09				T.	.05					T.		0.36
Kirtley	...do	.18																							12							0.39
Kirwin	Big Horn																															
Knowles	Bell Fourche	.09			T.					.27				T.						.14	.03		.09			T.				.11		0.73
Lander	Big Horn													T.						T.												T.
Laramie	North Platte																											.06				0.06
Leo	...do																			.10							.01					0.11
Lolabama Ranch	Big Horn	.10		.05						.20				.05								.20		.10					.10			0.80
Lovell	...do	.01								.23				.03						.07			.10	.04	T.		.18			T.		0.66
Lusk	Niobrara																															0.00
Manville	...do	.20	.02	.01						.03										T.					.07				T.			0.33
Moorcroft	Belle Fourche																											.05		T.	.04	0.51
Moore	North Platte	.32														.01	T.			.03												0.12
Newcastle	S. F'rk Cheyenne	T.		T.						.12				T.						T.	T.			T.								0.21
Pathfinder	North Platte	.03																		.18												
Phillips	...do																										.02					0.55
Powell	Big Horn	.05							.42					.06																		0.11
Rawlins	North Platte																	T.		T.				T.			11					
Riverton	Big Horn																		T.													0.20
Saratoga	North Platte																									20						
Sheridan	Tongue	T.		.15	T.				.20	.11		.01		.17						.05	.01	T.	.02	.08		T.	T.		.01	.03	T.	0.84
Shoshone Dam	Big Horn	.12								.30				.04										.43	T.		.13		.16		.30	1.18
Soldiers' Home	Powder	.23		.30						.35				.10						.01		.03	.04	.40	.30	T.	T.		.31	.10		1.28
South Pass City	North Platte																			.15										.03		1.19
Thermopolis	Big Horn	.01																						.03	.01							0.19
Upton	Cheyenne	.26																						.02			.01					0.30
Valley	Big Horn							.03						.03																	.11	0.09
Verona	Tongue			T.					.51					.25					.20							.06						1.07
Wiant's Ranch	North Platte									T.														.05		T.				T.		0.06
Wiley	Big Horn																															0.05
Wyncote	North Platte																															0.00
Yellowstone Park	Yellowstone	.01		.02			T.	.20	T.	T.		.25						T.	.15	.04	.14	.09		.05	.04	.26	.18	.04	.06	T.	T.	1.53
Fountain Hotel	Madison			.19				.10	.10					.15						.17	.20	.31	.22	.16		.16	.04	.04	.08	.08		2.00
Grand Canyon	Yellowstone	.06		.40			T.	.10	.17									T.	T.	.60	.20	.50	.20	.40	.08	.20	.30		.20	.20		3.61
Lake Hotel	...do			.04				.20	.10											.21	.23		.22	.23		.23			.21			1.67
Norris	...do	.10		T.			T.	T.	.20	.10	T.		T.	T.				T.	.10	.45	.10	.30	.10	.40	T.	.50	.35	T.	.25			2.95
Riverside	Madison								.01	.02	.03		.08						.02	.05	.06	.07		.11	.12	.20	.23	.23	.24			1.47
Soda Butte	Yellowstone			.10					.10	.05										.30	.20	.10	.20	.10			.10		.05	.10		1.40
Sylvan Pass	Big Horn	T.	T.	.14					.12	.26	T.	T.	T.	T.	T.	T.	T.	T.	T.	.16	.22	.01	T.	.37	.31	.19	T.	T.	.39	.21	.02	2.40
Thumb	Yellowstone	.05		.10					.45	.35								.15	.12	.20	.10	.20	.65	.20	.45	.25						3.27
Tower Falls	...do			.10					T.	.20									T.	.40	.50	.10				.10	.20					1.60
Upper Geyser Basin	Madison			.01					.60				T.					T.	.20		.07	.04	.20	.18	.20	.25	.50	.20	.10	.20		2.75
Montana.																										T.	.14					0.19
Adams	Yellowstone				T.				.05											T.												
Adel	Missouri			T.	T.					T.				.46				T.			T.	.02			.05	1.20	.20		.10			2.03
Agricultural College	Gallatin	T.		.08					.17	.07					.58			T.	T.	.35	.02			T.	T.	.43	T.	T.	T.			1.70
Augusta	Sun River								T.					.37								T.				.70						1.07
Babb	Milk River			.08			T.	.10	.10	T.									T.		.05	.05				.35	.05					0.78
Bald Butte	Missouri	T.		.17	.09			.26	.05	.31		.32						T.	.08	.02	T.	.28	.07	.14	.13	.50	T.	.08	.10			2.60
Bigtimber	Yellowstone																						.10			.15				.45		0.70
Bigtimber Creek	...do				T.			.28	.05			.08	.20								.07		.11		.13	.11	.12		.30	.03		1.48
Billings	...do							.10	.25				.10							.18					T.	.02		.20	.10			0.95
Boulder Nursery	Jefferson	T.	T.					.12	.06			.23						T.	.05			T.	.12	.23	.18	.32						
Bowen	...do	.02		.09				.23	.02	.16		.25							.06	.01		.17	.02	.32	.19	.45		.08	.17			2.25
Bridger	Yellowstone	T.						.33																		T.				.18		0.33
Broadview Exp. Sta	...do									.30				.04						.45	.05			.05			.11		.07	.16		0.18
Busby	...do	.09		.01															T.	.05			.01	.02	T.	.05	.05		.14	.08	T.	1.33
Busteed	...do			.02				.01	.04					.05																		0.52
Cabin Creek	Jefferson			T.								.28							.09				.05	.53				T.	T.			0.95
Canyon Ferry	Missouri			.08					.15	.02		.20							.12		.05	T.				.29			T.			0.91
Cascade	...do			.01	T.			T.	T.			.44							T.		T.	.03				.60	.05		T.	.02	T.	1.15
Cataract Creek	Jefferson																															
Chessman Reservoir	Missouri	.05		.37				.11	.10		T.	.20						T.	T.				.18		.16	.09	.56	.09		.08	.10		2.09
Chester	...do																			T.							.07	.13				0.55
Chinook	Milk River									.09				.26																		
Chouteau	Missouri										*	*	*	*	*	*	*	.25		.05		.28						18		.08		0.84
Clear creek	Milk River													.40								T.	T.			.33	T.		T.		T.	0.73
Clemons	Missouri													.22	.04				.03	.02		.01	.14	.06	T.	.04	.11		.12	.11	T.	1.05
Clydepark	Yellowstone	T.		.05				.10												.02	.04	.18			.06	.35	.04	T.	.16		T.	1.49
Copper	Musselshell		T.	.03	T.			.20	.20	.03		.12								.57	.09			.06			.40		.35	.30		2.21
Crow Agency	Big Horn	.03			.10				.31											.05						.08	.08			.02		0.23
Culbertson	Missouri		T.		T.		T.	T.	T.	T.																T.	.08					0.08
Cut Bank	Marias								T.										T.												.40	0.40
Decker	Tongue							T.																								
Delpine	Musselshell																			T.	T.	T.				.24	.12		T.	T.	T.	0.55
Denton	Missouri	T.			.02				.06	.05	T.		.06	T.					T.	.06			.25		.30	.52						1.59
Dillon	Jefferson	.02							.02	.15			.27								.15		.06	.04	.15	.29		T.	.10	.01	T.	1.47
Dirty Creek	Musselshell	T.		.08					.26	.10	.20		.03						.16		.22	.42	.14	.32	.44	.33	.63	.21	.24	.06		4.35
Dry Creek	Missouri	.08		.33	.04				.46	.07		.20																				

TABLE 2.—*Daily precipitation for November, 1910. District No. 6*—Continued.

Stations	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Montana—Continued.																																
Dry Wolf Camp	Missouri			.10	.10				.35			T.	.09								.05	.17		.10	.10	.55		.01				1.62
East Gallatin River	Gallatin	T.		.10					.18	.14			.18	.11					.03	.27	.27		.33	.17		.03	.23		.41			2.45
Ekalaka	Little Missouri	T.																		.08	.04									.03		0.15
Elkhorn	Jefferson			.07	T.				.05	.06	T.	.10	.05					T.	.10				.19	.24	.04	.20	T.	T.	.22			1.32
Evans	Missouri																									1.20	.30				.10	
Fallon	Yellowstone								T.	.35										.22							.28					0.86
Family	Marias	.01								.06									.03							.12						0.22
Fish Creek	Jefferson	T.			.27				.34				.40							.10						1.15						2.26
Fishtail Creek	Yellowstone																															
Flathead Creek	....do	.02		.32					.60				.49						.17	.31	.52		.41	.31		.10	.33		.54	.34	.19	4.65
Forsyth	....do									.10					T.														.15	.15	.03	0.43
Fort Benton	Missouri									.35	.25				.18	.15														.20		1.13
Fort Shaw	Sun River																										.20	.15				0.35
Foster	Big Horn	T.			T.					.13			T.	.11					T.	.39						.09		T.	.09	T.		0.81
Garneill	Musselshell								.15		T.	T.	T.						.10	.05	.10		.10			.15	.10	*	.20		.10		1.05
Glendive	Yellowstone																															
Goldbutte	Marias	.03		T.						.04	T.								.03		.03									.02	.01	0.16
Graham	Powder	.06			T.					.11										.14	T.		T.	T.	.06					.04		0.41
Grayling	Madison	.08		.04							.11		.36	.13					.18	.22	.09	.09	.03	.14	.05	.22		.08		.10		1.92
Great Falls	Missouri			T.	T.				.01	.08	.05		.61						.05							.43	.12			.04		1.39
Half Moon Pass	Musselshell	.01		.10	.01			T.	.40		.30	T.	.20						.10	.20	.25		T.	.10	.04	.10	.40	.01	.15		.01	2.38
Half Way House	Missouri	.07		.06					.37	.13			.45	.23					.13	.19	T.			.15	.17	.29	.24		.03	.07		2.57
Harlowton	Musselshell																															
Havre	Milk River	T.	T.	.02		T.			T.	.20		.02	.15						.04		.02		T.			.15	.08		T.	T.	.01	0.69
Helena	Missouri			.02	.02			T.	.03	.03	T.	T.	.25					T.	.03	T.		.06	T.	T.	.34	.69	T.		.17	T.	T.	1.64
Highwood	....do		T.	T.	.10	T.			.10	.35			.18	.10					T.	T.	.01	.03				.30	.20	T.			T.	1.27
Homepark	Jefferson	.02							.10										.23				.23		T.	.26			T.			0.84
Huntley	Yellowstone									.41										.45										.35		1.21
Jones Canyon	Gallatin		.02						.46		.05	.30	.45					T.	.45	.45	.34	.39	.02			.47			.03			3.43
Jordan	Missouri																															
Lewistown	....do			.09	.11				.11											.05						.54	.06	.02				0.98
Livingston	Yellowstone			T.	T.				.08	.05			.16	.15						.25	.10			.10	.50		.10					1.50
Lodge Pole Creek	....do																															
Lonetree	Missouri				.13				.09	.05			.25													.87						1.39
Lost Horse Creek	Musselshell			.15					.10	.10	.03		.10							T.	.20		.20		.20	.20	.20	.10	.15			1.73
Malta	Milk River	T.		T.					T.	.04	.01		.05	T.							.01					.15	.25	T.	T.	T.		0.51
Meadow Creek	Madison																															
Melstone	Musselshell																			.16							.08				.10	0.34
Mildred	Yellowstone				.03				.11												.07	T.	T.		T.			.01				0.22
Miles City	....do	.05							.12	.01										.25	.17					.50			.01	.02		1.13
Moore	Missouri			.10					.15				.20							.15						.17	.09		T.	T.	T.	0.86
Norris	Madison																															
Nye	Yellowstone			.09					.05					.10									.03		.01	.12	.19			.02		0.61
Olsen Creek	Jefferson	.03		.25					.30				.18					.03	.04				.15	.14		.30			.27			1.69
Pipestone Pass	....do	.03	.15						.50				.15							.18			.15		.06	.31			T.			1.53
Poplar	Missouri			T.					T.				T.	T.						T.						.10	.30					0.40
Raymond	....do			T.					.30	T.		T.	T.										T.		.12	.27						0.69
Red Lodge	Yellowstone	.10		T.					.18					.15					.08				.04		T.	.08						0.63
Reese Creek	Gallatin																															
Renova	Jefferson	T.		T.					.25				.31						T.			.15		T.	.02	.43	.02		T.			1.18
Rimini	Missouri																															
Ryegate	Musselshell									T.			T.																	.15		0.15
Sedan	Yellowstone																															
Springbrook	....do			T.	T.				T.	T.										.02				T.		.20	.20	T.	T.	T.		0.42
Stearns	Missouri												.40													T.	.30					0.70
Three Forks	Madison																															
Tokna[]	Yellowstone								.19											.05							.35					0.59
Townsend	Missouri																															
Trail Creek	Yellowstone	.08		.23					.23	.18	.04		.28						.23		.29		.12	.22		.07	.16		.10			2.23
Utica	Missouri	.02		.10					.17				.10									T.			T.		.34	T.	T.		T.	0.73
Valentine	Musselshell								.02	.06			.03						T.		.03						.17			T.	T.	0.31
Virginia City	Jefl. or Madison	.04							.12	.08			.52	.19					.06	T.	.08		.05	.08	T.	.03	.65	.15	.07			2.12
Wall Rock Mountain	Missouri			.15					.06	.02	.40		.18						.02		.15	.04	.30	.16	.06	.09	.18		.05	.06		1.92
Warm Springs Creek	Madison	.05		.13						.20	.09		.28	.08				T.	.20	.27	.03	T.	.17	.27	.03	.03	.15		.03	.22		2.23
Willow Creek	Yellowstone																															
Wolf Creek	Missouri												.51													.61	.10					1.22
Wolf Point	....do																															
Woodville	Jefferson	.02		.08					.45		.02		.40					.02	.02		.08				.20	.29	.03		.07			1.68
North Dakota.																																
Aplin	Knife								.12																				.05			0.17
Beach	Little Missouri				.02					.17				T.						.24											.30	0.73
Berthold Agency	Missouri								T.	.05										.04	T.					.04			T.			0.13
Bismarck	....do	T.			T.				.12	T.				T.				T.		.02	T.						T.		T.			0.14
Broncho	Knife								T.											T.	T.				T.					T.		T.
Buford	Missouri											T.				T.				.16		.02				.50						0.68
Coal Harbor	....do																															
Dickinson	Heart			.02						.11		T.				T.				.02									T.	T.		0.15
Edgeley	James									.13										.03	T.											0.16
Epping	Missouri								T.											.15						.15	.22	T.				0.52
Fullerton	James	T.							.06			T.		T.	.04					.01	.03											0.14
Haley	Grand				T.					T.	T.										T.		T.							T.		T.
Hettinger	Cannon Ball																													T.		T.
Howard	Missouri	T.		T.	T.				T.			T.	T.	T.	T.					*	.37	T.	T.			.30	.30	.13				1.10
Jamestown	James																			*	.15											0.15
Lamoine	Missouri	T.							T.					T.																		T.
La Moure	James																															
McHenry	....do																															
Manfred	Sheyenne	T.							.10				T.	T.						.20	.10					T.						
Marmarth	Little Missouri	T.			.01					.06										.05		T.	.03			T.				T.		0.13
Marstonmoor	James	T.	T.		T.				T.	T.	T.			T.					T.	T.		T.							T.			T.
Medora	Little Missouri																			T.							T.					T.
Melville	James									.23										.05												0.28
Mott	Cannon Ball				T.				.10													T.										0.10
Napoleon	Missouri	T.							.14					T.					T.										T.			0.14
New England	Cannon Ball																															
New Salem	Heart	T.								.03																		T.				0.03
Orange	Cannon Ball	.12																														0.12
Palermo	Missouri																															
Schafer	Little Missouri																															
Steele	Missouri																															
Washburn	....do	T.								.14										.02									T.			0.16
Williston	....do								.02		T.									.10				T.	T.	.18	.36					0.66
Wishek	....do																															

TABLE 2.—*Daily precipitation for November, 1910. District No. 6*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
South Dakota.																													*			
Aberdeen ‖	James	.15	T.		T.										T.						T.		.05									0.20
Academy	Missouri	.15												T.						T.												0.15
Alexandria	James	.15												T.	T.																	0.15
Ardmore ‖	Cheyenne									.30																						0.30
Armour	Missouri																															
Bellefourche	Cheyenne	.06																					.10									0.16
Brookings	Big Sioux	.02	.04	T.											.05							T.	.06									0.17
Camp Crook	Little Missouri																			T.							T.			T.		T.
Canton	Big Sioux								T.																							T.
Cascade Springs	Cheyenne	.20								.15				T.						.06												0.41
Castlewood	Big Sioux	.02	.08											.05	.02					T.			.21									0.38
Centerville	Missouri	.02	.04											T.	T.	T.		T.			.03								T.			0.09
Chamberlain	do																															
Clark	James	.26			.16									.10	T.	T.					T.		.04									0.56
Cottonwood	Missouri	.18		T.										.25						T.				T.						.10		0.53
Crow Creek	do	.75												.10									T.						T.			0.85
Daviston	Grand	.34																												T.		0.34
Deadwood	Cheyenne	.50		.10						.25				.10						.05	T.		.25							.35		1.60
Deerfield	do	.10			.03					.05				.05						.03	.03									.05		0.34
De Smet	James	.10												.10	T.					T.			.15									0.35
Dowling	Cheyenne	.12		.10										.07											T.					.05		0.34
Dumont	do	.15			T.					.08				.03						.04	.19		T.		.04					.37		0.90
Elk Mountain	do	T.								.07				T.						.10	.06	T.		.02						T.		0.25
Elk Point	Missouri																															
Englewood	Cheyenne	.25			.05						.15			.05						.30	.50		.30									.40	2.00
Eureka	Missouri									T.								T.	T.	T.												T.
Faulkton	James	.14												.02									T.									0.16
Flandreau	Big Sioux	.02												T.							T.		.20									0.22
Forestburg	James													.10						T.			T.									0.10
Fort Meade	Cheyenne	.13								.12				.05						.23	T.		.23							.30		1.06
Frederick ‖	James																															
Gannvalley	Missouri	.10												.10																		0.20
Greenmont	Cheyenne	.22		T.						.20				.10						.10	.20			*	.25					.25		1.32
Greenwood	Missouri																				.14											0.14
Hardy Ranger Station	Cheyenne	.24					.19			.30				.02							.40	.10		.02				.18		.10		1.55
Harveys Ranch	do	.40	.20							.20				T.			T.			.10	.05				.05		T.			.40		1.40
Hermosa	do	.03			.05					.09				T.						.02	T.									.02		0.21
Highmore	Missouri	.24												.10		*							.06									0.40
Hill City	Cheyenne	.16			.21					.11																				.14		0.62
Hopewell	do	.18												.02																		0.20
Howard	James	.08	.01											.10	T.	T.				T.	T.											0.19
Howell	do	.18												.10				T.					.01									0.29
Huron	do	.05		T.										.06	T.			T.	T.	T.			.06							T.		0.17
Ipswich	do	.08							T.					T.						T.												0.08
Kadoka	White				.17					T.				T.																.07		0.24
Kennebec	Missouri	.18												.05																T.		0.23
Kidder	James	T.	T.							T.		T.		T.	T.			T.		T.	.03		T.							T.		0.03
Kimball	Missouri													.01																		0.01
La Delle	James				.15									.18	T.					T.	T.		.20									0.53
Lead	Cheyenne	.40		.02	T.					.19				.08						.04	.06		.05	.11						.21		1.16
Lemmon	Grand								T.																					T.	T.	T.
Marion	Missouri	.10	T.												T.						T.								T.			0.10
Marston	do	.24																														0.24
Mellette	James	.19			T.									.10	T.						T.		T.									0.29
Menno	do	.02																		.03												0.05
Milbank ‖	Minnesota	.07	T.												.18								T.	.03								0.28
Mitchell ‖	James													.07						.04												0.11
Murdo	White				.30																											0.30
Oelrichs	Cheyenne																															
Orman	do	.22																		.02										.10		0.34
Ottumwa	Missouri													T.																		T.
Pierre	do																															
Plankinton	James	T.												.03					T.	T.									T.			0.03
Pollock	Missouri																	T.		.02												0.02
Rapid City	Cheyenne	.02		.01						.07				.03						.20	T.	T.							.05	.07		0.45
Redfield ‖	James														.10																	0.10
Rochford	Cheyenne	.05								.06				T.							.05				.05					.07		0.28
Rosebud	White	.17			T.					.10				T.	T.					T.					T.					.20		0.47
Roslyn	Big Sioux	.37	T.											.07						T.	T.		T.									0.44
Savoy	Cheyenne																															
Selby	Missouri								T.					T.																T.		T.
Sioux Falls	Big Sioux	T.												T.	T.	T.			T.	T.												T.
Spearfish	Cheyenne		.30		T.									.04							.03		.03	.01						.17		0.58
Stephan	Missouri	.12	T.		T.									.05		T.			T.				T.									0.17
Tama	Cheyenne																															
Vale	do				T.									T.						T.	T.									.19		0.19
Vermilion	Missouri		T.		T.					T.									T.		.05								T.			0.05
Water's Ranch	Cheyenne	.07		.04						.35					.10						.11		.08							.13		0.88
Watertown	Big Sioux	.10	T.											.10									.10									0.30
Wentworth	do	.11												.02																		0.13
White Lake	Missouri	T.	T.											T.									T.									T.
Winner	White																															
Yankton	Missouri	T.			T.				T.									T.	T.	.02								T.				0.02
Minnesota.																																
Pipestone	Missouri		T.											T.						T.	T.		T.							T.		T.
Colorado.																																
Akron	Republican															.05					.10											0.15
Alma	South Platte															.15																0.15
Arriba (near)	Republican				T.										T.	T.												T.				T.
Auldhurst	South Platte				.42										.09													.32				0.83
Boreas	do																															
Boulder	do				.05											.14												.08				0.27
Burlington	Republican																.05	T.	.01	T.								.02				0.08
Cassells	South Platte				T.									*	*	.30							.02					T.				0.32
Castle Rock	do																															
Cheesman	do				.25									T.	T.													.25				0.50
Cheyenne Wells	Smoky Hill				T.											.40												T.				0.40
Cope	Republican															.02												.10				0.12
Corona	South Platte		*	*	1.30										T.	1.20	1.10											.18	T.	.06		3.84
Denver	do				T.									.05	.05	T.				T.							.06	T.				0.16
Edgewater	do													.01		T.				T.								.10				0.11
Estes P'k Fish H'y	do				.20										.10													.15				0.70

TABLE 2.—*Daily precipitation for November, 1910. District No. 6*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Colorado—Continued.																																
Fort Collins	South Platte				T.											.04	T.											.07				0.11
Fort Morgan	do																											T.				T.
Frances	do				.19											.05	T.	T.		T.			T.	T.	.02			.06	T.	.03		0.35
Frys Ranch	do															.19					T.		T.		.04			.11	T.			0.34
Georgetown	do			.11											T.	.25							.07	T.			.02		T.			0.45
Greeley	do															.08												.03				0.11
Grover	do															.01												.01		T.	T.	0.02
Hartsel	do				.14										.03	.20												.02				0.39
Hawthorne	do				.06											.17	.03															0.26
Holyoke (near)	do	.19													.05																	0.24
Idaho Springs	do				.08											.12																0.20
Keota	do																															
Kessler	do																															
La Porte	do															.15												.13				0.28
Le Roy (near)	do		.02													T.				T.								.09		.02		0.13
Longmont	do																															
Longs Peak (near)	do																											.27				0.27
Moraine	do				.03											.02							T.	.01				.05	T.	.03		0.14
Platte Canyon	do				T.																							T.				T.
St. Cloud	do				T.											.25												.15				0.40
Sedgwick	do															.10				.01												0.11
Sill Mine	do				.25										T.	.50	.12	.06	.05	.05	T.		.12	.15	T.			.12	.09	.05		1.56
Silver Lake	do				.27											.05		.13							.67	.05			.33			1.50
Spicer (near)	North Platte															.05				.04	T.	T.	T.	T.				.04				0.13
Sterling	South Platte		.03													T.												.20	.10			0.33
Waterdale	do				.07											.10												.09				0.26
Westlake	do																															
Wray	Republican															T.				T.							T.					T.
Yuma	do															.02				T.								T.				0.02
Nebraska.																																
Ainsworth	Niobrara	.08	T.		T.					T.										.13				T.					T.			0.21
Albion	Loup																			.22									T.			0.22
Alliance	North Platte	T.												T.		T.																T.
Alma	Republican																			.14								T.				0.14
Anoka	Niobrara	T.																	20													0.20
Ashland	Platte				T.																.02											0.02
Atkinson	Elkhorn																				.10									T.		0.10
Auburn	Little Nemaha				.05																.12									T.		0.17
Beatrice	Blue				.03																.10											0.13
Beaver City	Republican		.04																		.04	T.										0.08
Bellevue	Missouri				.12									.12																		0.24
Blair	do				.02						T.										.13											0.15
Bloomfield	do	T.		T.						T.										T.												T.
Bridgeport	North Platte	T.														T.	T.			T.								T.				T.
Broken Bow	Loup																															0.00
Burge	Niobrara																															
Callaway	Loup																															0.00
Cambridge	Republican	T.	.06																T.		.01	T.	T.					T.		T.		0.07
Canton (near)	North Platte																															
Columbus	Loup				T.															.25										T.		0.25
Creighton	Missouri				.02															.01												0.03
Crete	Blue				.10																											0.10
Culbertson	Republican	T.																														T.
Curtis	do																															0.00
David City	Blue				T.														T.		.20									.03		0.23
Dawson	Great Nemaha																															
Elsie	Republican			.05						T.						T.								T.							T.	0.05
Enderslake	Loup																															
Ewing	Elkhorn																				.11				.08							0.19
Fairbury	Blue				T.															.12												0.12
Fairmont	do																				.12											0.12
Fort Robinson	Niobrara	.10	.06		.05																									.17		0.38
Franklin	Republican																			T.	.20											0.20
Fremont	Platte																				.10											0.10
Fullerton	Loup																T.			.19	.25									T.		0.44
Geneva	Blue	T.			T.																.16											0.16
Genoa	Loup		T.		T.					T.				T.	T.				T.		.24				T.							0.24
Gordon	Niobrara																															0.00
Gosper	Republican																			.03												0.03
Gothenburg	Platte																				.10											0.10
Grand Island	do		T.																	.25												0.25
Grant	Republican		.05													T.				.08							T.					0.13
Greeley	Loup	T.			.04															.14												0.18
Halsey	do	.10																		.19												0.29
Hartington	Missouri	T.								T.									T.		.20											0.20
Harvard	Blue																				.34											0.34
Hastings	do																				.33											0.33
Hayes Center	Republican																															
Hay Springs	Niobrara	T.								T.										T.	T.			T.						T.		T.
Hebron	Blue		T.		T.																.13											0.13
Hemingford	Niobrara	.08			.03																				.07							0.18
Hillside	North Platte															.02				.04												0.06
Holdrege	Republican		T.																		.23											0.23
Hooper	Elkhorn				T.					T.										.15												0.15
Imperial	Republican															T.				T.	T.						T.					T.
Kearney	Platte																				.30											0.30
Kimball	South Platte	T.														T.											T.			.10		0.10
Kirkwood	Niobrara									T.										.19												0.19
Kowanda	North Platte	.10														.02				.03												0.15
Lexington	Platte																			.10												0.10
Lincoln	do		T.		.03															.02	.03									.02		0.10
Lodgepole	South Platte															T.				T.							.05					0.05
Loup	Loup																			.38												0.38
Loyal	do																					.26										0.26
McCook	Republican																															0.00
Madison	Elkhorn				T.																											T.
Marquette	Platte				T.															T.	.30									T.		0.30
Mason City	Loup																				.15											0.15
Minden	Blue		.02																	.33							T.					0.35
Mitchell	North Platte	.05														T.														T.		0.05
Nebraska City	Missouri									T.											T.											T.
Norfolk	Elkhorn				.03					T.											.26			.06								0.35
North Loup	Loup		T.																	T.	.08											0.08
North Platte	Platte	T.														T.				.11	T.				T.					T.	T.	0.11

TABLE 2.—*Daily precipitation for November, 1910. District No. 6*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Nebraska—Continued.																																
Oakdale	Elkhorn				T.					.01					T.				T.	.18				.07							0.26
Omaha	Missouri				.06					T.											.11										0.17
Ord	Loup																				.20										0.20
Palisade	Republican																												T.		0.00
Pawnee City	Great Nemaha																				.15										0.15
Paxton	South Platte															T.				.02											0.02
Plymouth	Blue																				.08										0.08
Purdum	Loup		.10		.01															.13				T.	.02				T.		0.26
Revenna	do																		T.	T.	.23							T.		T.		0.23
Redcloud	Republican		.03																	.26	.26										0.29
St. Libory	Loup																			.21											0.26
St. Paul	do																														0.21
Santee	Missouri																				.00										0.00
Sargent	Loup																				T.										T.
Schuyler	Platte				T.											T.				T.	.22				T.					T.	0.22
Scottsbluff	North Platte	.01	.02																	.30									.05		0.03
Seward	Blue	T.																													0.35
Sheridan	Loup															T.												.10		T.	0.15
Sidney	South Platte		.05																	T.	.05										0.12
Springview	Niobrara	T.	.07		T.																.15										0.25
Stanton	Elkhorn				.10																										0.30
Stratton	Republican	.30																			.20										0.20
Superior	do					.06															.12										0.18
Tecumseh	Great Nemaha				.05					.08																					0.13
Tekamah	Missouri				T.																									T.	T.
Tobias	Blue																				.07										0.21
Turlington	Little Nemaha				.14					T.										.05				T.						.02	0.12
Valentine	Niobrara	.05																		.30											0.30
Wahoo	Platte									T.										.15											0.18
Wakefield	Elkhorn				.03																										
Walthill	Missouri																			.22											0.22
Watertown	Platte																														0.10
Wauneta	Republican	.10								T.											.08										0.19
Weepingwater	Missouri				.11																										
Wellfleet (near)	Republican																				.25				T.						0.25
Westpoint	Elkhorn														T.					.11					.07						0.18
Wisner	do			T.																	.30										0.30
York	Blue																														
Iowa.																					.11										0.63
Afton	Missouri				.43						.09										.19										
Allerton	Charlton										.07				T.						.10										0.15
Alton	Floyd	.03			.02					T.	.13										.09										0.30
Atlantic	Nishnabotna				.17					.10											.10										0.41
Audubon	do				.21																.10										0.35
Bedford	Missouri				.25										.25																0.25
Centerville	Charlton				T.	T.												T.			T.										T.
Charlton	do																				.08	.02									0.36
Clarinda [1]	Nodaway				T.	.26				T.											.02										0.39
Corning	do				.37																.15							T.			0.31
Corydon	Charlton				.16							T.									T.										0.11
Council Bluffs	Missouri			.11																	.10	.01									0.61
Creston [1]	do				T.	.41				T.	.09										.01										1.03
Cumberland	Nodaway				1.02					T.																					T.
Denison	Missouri	T.			T.					T.																					0.42
Elliott	Nishnabotna				.42																.03										0.70
Greenfield	Nodaway				.52					.15											.05				T.						0.17
Harlan	Nishnabotna	T.			.07					.05						T.	T.				.13										0.58
Hopeville	Missouri				.38					.07											.04										0.09
Inwood	Big Sioux	.05														T.					.22							T.			0.31
Lamoni	Missouri				.09																										0.19
Larrabee	Little Sioux	.03			.15											.01					.16										0.16
Le Mars	Floyd	T.								T.						T.					.10										0.13
Lenox	Missouri				.03																.10										0.10
Leon	do				T.																.10										0.10
Little Sioux	Little Sioux				.07					.04											.11					.10					0.32
Logan	Missouri				.02											T.					.04										0.06
Massena	Nodaway																														
Mount Ayr	Missouri				.15	T.					T.	.17									.15										0.47
Odebolt	do				.08																T.										0.08
Onawa	do				.08					.05											.05					.03					0.21
Pacific Junction	do				.24					T.											.08										0.32
Rock Rapids	Big Sioux	T.			T.									T.	T.	T.					.05								T.		0.05
Sheldon	Floyd	.05														T.			T.		.15										0.20
Sibley [1]	Big Sioux	T.	.03													T.					.10										0.13
Sioux Center	Floyd	T.			.02					T.				T.		T.			T.	.11	.05										0.07
Sioux City	Missouri	T.			.04					T.	T.								T.		.30										0.15
Thurman	do				.08															.05											0.38
Washta	Little Sioux				.10						.15				T.		T.				.17					T.						0.15
Woodburn	Charlton				.37																										0.69
Kansas.																				.16								T.		T.	0.16
Abilene	Smoky Hill																				.20										0.20
Agricultural College	Kansas		T.																	T.	.06								T.		0.06
Alton	Solomon				T.																.30										0.30
Atchison	Missouri		T.																												
Baker	do																													T.	T.
Beloit	Solomon															T.				T.											
Blakeman	Republican																														0.18
Blue Rapids	Blue																				.18									T.	0.15
Centralia	do																				.15										0.21
Chapman	Smoky Hill																				.21										T.
Clay Center	Republican																	T.										T.		T.	0.15
Colby	do																			.05	.10							T.			T.
Concordia	do																			T.								T.			0.02
Densmore	Solomon		T.														T.														T.
Dresden	Republican		.02																		T.									T.	0.13
Ellsworth	Smoky Hill																				.13									T.	0.24
Enterprise	do																				.24										T.
Eskridge	Kansas																	T.		T.								T.		T.	0.18
Farnsworth	Smoky Hill																				.18									T.	0.05
Fort Scott	Marmaton																				.05									T.	0.12
Frankfort	Blue		T.																		.12										0.10
Garnett	Marais de Cygnus																											.10			T.
Goodland	Smoky Hill																												T.		0.
Gove	Blue																				.15									T.	
Hanover	do																														

TABLE 2.—*Daily precipitation for November, 1910. District No. 6*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Kansas—Continued.																																
Harrison	Republican		.01																		.21							T.				0.22
Hays	Smoky Hill		T.																													T.
Hill City	Solomon																												T.			T.
Horton	Kansas		T.		T.					T.											.20								T.			0.20
Hoxie	Solomon																															
Jewell	Republican		T.																		.10							T.		T.		0.10
Lawrence	Kansas																				.26									T.		0.26
Lebanon	Solomon																.04											T.				0.04
Lindsborg	Smoky Hill																															
Mankato	Republican																				.14								T.			0.14
Minneapolis	Solomon		T.																	T.	.10									T.		0.10
Moran	Marmaton																				T.						T.					T.
Natoma	Saline																															
Norton	Republican															T.				T.								T.				T.
Oberlin	do		.05													T.				T.												0.05
Oketo	Blue																				.18											0.18
Olathe	Kansas		T.																		.17									.03		0.20
Osage City	Marais de Cygnus																				.14						T.			T.		0.14
Ottawa	do																				.15											0.15
Phillipsburg	Solomon				T.															T.	.08							T.				0.08
Pleasanton	Marais de Cygnus																				.11						T.					0.11
Russell	Smoky Hill																															
Russell Springs	do																.06											T.				0.06
St. Francis	Republican															T.				T.								.02				0.02
Salina	Smoky Hill																				.09									T.		0.09
Scott	White Woman																.03											T.				0.03
Smith Center	Solomon																			.31												0.31
Topeka	Kansas																			T.	.25								T.	T.		0.25
Valley Falls	do		T.																		.30									T.		0.30
Vinland	do																				.16						T.			T.		0.16
Wakeeney	Smoky Hill																											T.				T.
Wallace	do																.07											T.				0.07
Wamego	Kansas																				.20											0.20
Missouri.																																
Amoret	Osage				T.																.15						T.	T.		T.		0.15
Appleton City	do				.01																.11						.05			.02		0.19
Arlington	Gasconade																															
Arthur	Osage																				.08						•					0.08
Avalon	Grand				.08																.19											0.27
Bagnell	Osage																															
Bethany	Grand																						.25									0.25
Bolivar	Osage				.03																.10						.06			T.		0.19
Boonville ‖	Missouri					T.																.20						.08				0.28
Brunswick ‖	Grand			T.																		.27						T.				0.27
Clinton	Osage																				.11						.06	.01		.15		0.33
Columbia	Missouri				.06																.19						.08	T.				0.33
Conception	do				T.																.15											0.15
Eldorado Springs	Osage																				.15											0.15
Fairport	Grand		T.		T.																.15											0.15
Fayette	Missouri				.08																.20							.03				0.31
Fulton	do					.05																.18						.20	.01			0.44
Glasgow ‖	do					T.																.02						.01				0.03
Grant City	Grand				.15																.21						T.					0.36
Harrisonville ‖	Osage																				.05	.15						T.		T.	.05	0.25
Hazelhurst	Grand		.05																		.18											0.23
Hermann ‖	Missouri					.02																.14						.18	.04			0.38
Houston	Gasconade				.30																T.						T.			.20		0.50
Huntsville	Chariton																															
Jefferson City ‖	Missouri				.02	.11																.17						.30	.10			0.70
Kansas City	do																				.25									.03		0.28
Kidder ‖	Grand																				.22											0.22
Lamonte	Missouri																				.17						T.			T.		0.17
Lebanon	Osage				.03															.10								.05		.17		0.35
Lexington ‖	Missouri																					.13										0.13
Liberty	do																				.36							T.				0.36
Lockwood	Osage																				.08						T.	T.				0.08
Marshall	Missouri		T.		.10																.15						.01	T.				0.26
Marshfield	Osage																				.10					.10			T.			0.20
Maryville ‖	Missouri				T.																.19	T.										0.19
Mount Vernon	Osage																				.05					T.						0.05
Nevada	do																				.10						T.	T.				0.10
Oregon	Missouri		T.		T.																.20									T.		0.20
Osceola ‖	Osage																															
Pattonsburg ‖	Grand				T.																.02	.22						T.				0.24
Rolla	Gasconade				.18																.07						T.	T.		.07		0.32
St. Charles	Missouri																											.14				0.14
St. Joseph	do		T.			T.															.08	.12						T.		T.	T.	0.30
St. Louis	Mississippi				T.																.02						.02	.26				0.30
Sublett	Chariton					T.															T.						T.					T.
Trenton	Grand	T.			T.						T.									T.	.36											0.36
Unionville	Chariton					.14				.05												.40											0.59
Warrensburg	Missouri																				.15						T.	T.		T.		0.15
Warrenton ‖	do					.02																.12						.20	.45			0.79
Warsaw	Osage				.17																.27						.05			.26		0.75
Wheatland	do																			.10							.05	.10		.10		0.35

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 6, Missouri Valley.*

Date.	Basin.		Cheyenne.		Fort Laramie.		Lander.		N wcastle.		Pathfinder.		Sheridan.		Yellowstone Park.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	Wyoming.															
1	44	23	44	21	46	26	47	28	49	28	49	22	41	26	37	23
2	42	24	42	25	40	28	40	28	40	28	40	26	36	26	33	24
3	43	25	43	26	42	28	42	28	42	28	42	26	36	26	34	24
4	43	26	43	26	42	28	42	28	42	28	42	26	36	26	34	24
5	44	17	43	17	42	27	42	27	42	27	42	27	36	26	34	24
6	38	17	38	17	40	27	40	27	40	27	40	27	36	26	34	24
7	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
8	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
9	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
10	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
11	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
12	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
13	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
14	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
15	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
16	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
17	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
18	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
19	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
20	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
21	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
22	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
23	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
24	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
25	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
26	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
27	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
28	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
29	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
30	38	18	38	18	40	28	40	28	40	28	40	28	36	26	34	24
Mns.	50.4	28.0	50.4	28.0	53.9	22.8	49.7	21.1	47.6	22.4	51.7	28.0	44.2	23.9	39.7	22.8

Date.	Billings.		Dillon.		Havre.		Helena.		Lewistown.		Malta.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	Montana.											
1	43	22	38	24	45	22	44	24	49	25	44	25
2	37	22	34	25	46	21	44	24	49	23	46	23
3	32	22	34	25	46	21	44	24	49	23	46	23
4	32	22	34	25	46	21	44	24	49	23	46	23
5	32	22	34	25	46	21	44	24	49	23	46	23
6	32	22	34	25	46	21	44	24	49	23	46	23
7	32	22	34	25	46	21	44	24	49	23	46	23
8	32	22	34	25	46	21	44	24	49	23	46	23
9	32	22	34	25	46	21	44	24	49	23	46	23
10	32	22	34	25	46	21	44	24	49	23	46	23
11	32	22	34	25	46	21	44	24	49	23	46	23
12	32	22	34	25	46	21	44	24	49	23	46	23
13	32	22	34	25	46	21	44	24	49	23	46	23
14	32	22	34	25	46	21	44	24	49	23	46	23
15	32	22	34	25	46	21	44	24	49	23	46	23
16	32	22	34	25	46	21	44	24	49	23	46	23
17	32	22	34	25	46	21	44	24	49	23	46	23
18	32	22	34	25	46	21	44	24	49	23	46	23
19	32	22	34	25	46	21	44	24	49	23	46	23
20	32	22	34	25	46	21	44	24	49	23	46	23
21	32	22	34	25	46	21	44	24	49	23	46	23
22	32	22	34	25	46	21	44	24	49	23	46	23
23	32	22	34	25	46	21	44	24	49	23	46	23
24	32	22	34	25	46	21	44	24	49	23	46	23
25	32	22	34	25	46	21	44	24	49	23	46	23
26	32	22	34	25	46	21	44	24	49	23	46	23
27	32	22	34	25	46	21	44	24	49	23	46	23
28	32	22	34	25	46	21	44	24	49	23	46	23
29	32	22	34	25	46	21	44	24	49	23	46	23
30	32	22	34	25	46	21	44	24	49	23	46	23
Mns.	33.2	22.0	34.2	25.0	46.0	21.0	44.0	24.0	49.0	23.0	46.0	23.0

Date.	Miles City.		Poplar.		Berthold Agency.		Bismarck.		Dickinson.		Jamestown.		Williston.		Aberdeen.§§		Chamberlain.		Huron.		Kadoka.		Lemmon.		Pierre.		Rapid City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	Montana.				**North Dakota.**										**South Dakota.**													
1	41	26	43	26	37	15	39	26	38	31	36	21	36	23	45	22	.....	.....	45	28	46	28	38	23	.....	.....	44	22
2	32	22	33	22	38	6	39	23	44	25	44	26	41	.....	32	12	.....	.....	32	15	47	21	32	14	.....	.....	45	25
3	27	26	27	26	26	3	26	13	31	16	27	11	.....	.....	26	14	.....	.....	26	11	28	15	26	14	.....	.....	32	16
4	45	22	46	22	36	16	36	22	36	16	36	22	.....	.....	36	16	.....	.....	36	16	36	16	36	16	.....	.....	36	16
5	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
6	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
7	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
8	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
9	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
10	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
11	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
12	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
13	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
14	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
15	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
16	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
17	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
18	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
19	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
20	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
21	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
22	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
23	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
24	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
25	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
26	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
27	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
28	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
29	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
30	44	23	44	23	36	17	36	22	36	17	36	22	.....	.....	36	17	.....	.....	36	17	36	17	36	17	.....	.....	36	17
Mns.	42.7	26.0	38.4	16.7	36.2	14.3	35.1	18.1	37.8	16.7	33.9	16.7	31.5°	15.7°	37.3	17.9	.....	.....	39.5	20.0	47.3	22.7	38.7	18.3	.....	.....	43.9	23.9

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 6*—Continued.

Date.	South Dakota.						Colorado.				Nebraska.															
	Sioux Falls.		Watertown.		Yankton.		Denver.		Wray.		Alma.		Bridgeport.		Grand Island.		Hay Springs.		Hebron.		Lincoln.		North Platte.		Oakdale.		Omaha.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	54	33	45	26	47	30	56	33	54	36	50	30	50	33	50	38	48	32	49	38	55	33	47	34	46	34	53	38
2....	42	19	36	22	45	24	59	32	60	30	50	32	56	32	52	20	55	31	49	28	48	26	49	30	46	16	46	27
3....	53	18	47	18	56	23	75	38	69	36	63	30	66	22	64	32	68	25	60	28	58	28	60	30	56	21	54	29
4....	51	25	51	27	50	27	45	33	60	33	50	34	60	26	50	42	50	25	53	40	52	32	53	28	52	24	47	35
5....	53	16	36	18	45	21	54	29	61	14	55	17	48	14	66	28	50	18	48	19	47	23	56	22	45	14	46	25
6....	56	25	64	30	61	24	65	33	68	23	69	20	66	15	72	28	62	20	63	27	61	30	68	21	63	22	57	33
7....	57	30	54	20	56	33	68	35	80	31	72	24	66	20	80	38	65	25	71	29	73	35	71	28	64	31	64	37
8....	58	39	40	24	63	27	72	32	79	30	78	24	74	20	55	40	70	34	72	30	76	38	73	27	68	27	69	34
9....	47	20	40	25	49	21	63	35	62	33	60	34	55	26	54	18	60	35	54	44	56	27	52	27	42	22	58	28
10....	40	10	35	20	34	21	68	34	66	31	57	30	63	18	48	22	59	11	51	22	47	24	62	18	46	19	44	26
11....	38	20	22	9	32	22	68	42	67	26	55	25	73	20	45	24	70	35	50	23	40	27	54	25	38	25	35	24
12....	40	22	40	18	41	21	65	41	51	26	58	24	55	25	48	20	70	26	50	26	46	25	44	24	43	16	44	25
13....	30	20	35	23	41	23	56	40	48	26	50	22	45	22	35	28	54	22	49	25	47	26	49	20	43	18	45	29
14....	31	21	33	20	33	27	41	34	48	22	48	22	46	11	32	24	45	12	30	27	37	29	45	16	33	26	36	30
15....	28	20	26	20	30	26	36	31	39	26	32	14	35	20	50	26	40	10	35	18	32	25	29	11	32	11	32	25
16....	38	20	23	18	45	14	45	30	40	27	45	26	40	23	50	30	45	23	41	25	44	23	46	26	47	5	40	20
17....	38	10	24	12	36	22	43	26	53	14	50	27	46	11	44	26	40	11	50	25	53	28	50	15	43	23	50	28
18....	27	20	22	19	26	20	59	31	59	14	48	26	58	8	58	25	55	3	37	23	36	21	51	11	33	17	36	24
19....	47	20	38	22	50	20	52	30	48	27	58	27	45	31	54	28	44	28	56	20	55	19	47	27	52	14	49	23
20....	42	21	30	23	39	21	54	23	61	15	52	26	48	10	55	23	42	16	52	31	50	33	49	20	43	26	47	32
21....	44	14	39	20	46	15	71	33	68	23	64	25	65	14	65	31	62	15	54	26	49	26	64	20	48	15	45	27
22....	50	30	50	29	54	32	56	36	59	30	66	26	53	30	58	23	52	25	73	35	65	36	59	28	60	27	63	35
23....	42	22	45	24	49	30	67	33	72	22	65	20	62	11	57	34	60	11	58	26	56	31	62	17	49	22	52	35
24....	40	30	45	28	52	32	71	47	60	28	60	33	56	30	62	31	52	32	59	40	57	35	55	30	52	30	56	43
25....	41	30	38	23	56	25	75	48	82	23	63	25	70	30	68	32	71	25	63	25	62	26	67	30	56	25	59	34
26....	53	34	38	25	48	31	63	25	68	29	65	25	51	21	40	26	58	25	63	41	66	34	62	26	47	26	64	35
27....	40	24	32	15	32	19	34	22	39	19	42	27	39	12	48	20	34	14	41	25	36	22	40	17	32	16	35	25
28....	38	19	28	9	35	14	59	23	56	16	46	12	44	15	45	24	47	14	46	13	44	20	49	17	36	14	36	24
29....	35	15	25	14	32	17	52	27	47	27	43	25	48	23	47	25	48	24	41	27	39	20	38	26	35	15	37	23
30....	22	8	18	4	26	11	44	24	38	27	37	24	35	24	34	23	34	16	34	20	31	18	33	12	26	10	27	18
Mns..	42.5	21.8	36.6	20.2	43.6	23.1	57.9	33.3	58.7	25.5	55.0	25.2	53.9	20.6	52.9	27.6	53.7	21.4	51.7	27.5	50.6	27.3	52.8	22.8	45.9	20.4	47.5	29.0

Date.	Nebraska.		Iowa.						Kansas.										Missouri.							
	Valentine.		Clarinda.§		Sibley.§		Sioux City.		Colby.		Concordia.		Salina.		Topeka.		Wakeeney.		Columbia.		Kansas City.		St. Louis.		Unionville.§§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	48	31	50	32	45	32	46	35	67	33	53	35	70	36	52	36	62	37	65	35	56	41	69	40	50	42
2.....	45	18	47	25	38	18	44	24	57	35	51	32	48	33	51	34	55	35	46	25	49	34	48	33	44	28
3.....	63	31	54	21	.....	14	51	25	70	32	61	30	56	34	58	31	68	31	49	23	54	34	43	29	50	16
4.....	45	21	42	26	53	.....	52	30	60	38	53	36	61	44	49	34	58	40	40	35	47	37	43	34	40	24
5.....	50	16	47	23	41	16	42	21	55	12	50	26	48	22	48	28	53	22	46	30	49	31	45	35	42	20
6.....	65	27	57	23	54	16	56	22	72	25	63	31	66	30	60	34	73	23	58	25	58	37	56	30	55	25
7.....	68	29	51	27	53	25	60	33	73	33	74	34	72	32	72	38	73	35	66	31	70	42	68	39	70	30
8.....	71	32	66	31	54	21	59	30	78	32	79	33	73	31	75	40	82	37	66	39	73	44	62	40	65	32
9.....	51	20	60	34	42	25	52	23	70	39	58	34	66	30	66	46	65	43	75	38	67	37	73	47	63	40
10.....	45	17	45	25	39	20	35	23	66	20	53	26	49	22	50	28	62	20	46	30	49	30	47	34	44	24
11.....	46	24	39	24	31	9	33	16	71	28	52	29	64	28	51	29	63	29	45	29	49	34	42	29	50	19
12.....	45	23	45	21	44	12	41	21	55	22	54	30	65	20	54	30	58	26	48	25	50	28	43	27	52	24
13.....	40	26	49	23	44	20	44	25	52	24	51	30	66	27	52	36	53	20	57	35	53	35	49	35	54	28
14.....	32	20	36	28	29	24	32	28	49	24	40	22	46	27	41	33	48	26	44	32	43	33	44	35	38	26
15.....	38	17	27	27	26	22	30	27	40	24	35	22	36	25	37	27	37	26	34	24	38	28	36	32	36	24
16.....	44	19	25	15	35	18	40	24	32	25	45	29	40	24	45	28	43	27	40	22	42	26	40	27	33	23
17.....	38	19	53	16	40	15	43	24	54	24	52	30	50	33	52	30	52	31	46	19	50	32	40	26	36	14
18.....	49	15	20	20	22	20	25	22	55	17	42	24	44	27	45	32	50	19	50	24	48	33	50	30	40	16
19.....	44	24	52	11	48	20	45	21	49	22	57	22	56	26	57	24	57	24	53	23	54	25	47	25	48	20
20.....	46	16	50	20	32	22	40	22	54	18	53	32	59	34	53	39	55	26	43	34	51	38	55	32	44	23
21.....	60	18	36	22	41	17	40	20	67	22	55	28	56	35	56	32	65	28	53	28	55	37	52	37	45	27
22.....	52	24	56	22	50	17	49	32	65	34	68	34	67	30	70	35	68	33	61	31	68	37	53	27	48	25
23.....	61	19	52	32	49	24	50	32	67	19	62	32	66	26	61	38	64	21	58	40	61	44	59	46	56	30
24.....	49	28	53	22	53	22	51	34	69	35	60	37	68	29	62	49	63	39	64	38	62	49	65	45	58	35
25.....	72	23	52	23	.....	30	55	27	76	38	68	32	66	30	64	32	76	31	60	29	62	41	57	41	60	33
26.....	46	24	34	29	50	.....	55	31	73	37	68	35	76	32	74	46	71	35	70	44	70	49	60	42	57	30
27.....	34	14	36	20	31	19	32	21	45	25	38	21	57	28	46	27	55	27	64	30	50	29	65	34	43	36
28.....	42	12	40	20	33	9	32	17	55	11	48	15	47	11	45	20	56	11	39	22	41	23	38	26	36	20
29.....	28	21	30	18	31	11	33	17	45	25	41	27	43	25	40	27	44	19	36	20	39	27	36	28	35	15
30.....	25	7	29	16	24	8	24	12	38	25	36	17	36	24	34	20	40	26	32	20	33	21	31	21	28	14
Mns.....	48.1	21.2	44.4	23.2	40.4e	18.8e	43.0	24.6	59.3	26.6	54.0	28.8	57.2	28.5	54.0	32.8	59.0	28.2	51.8	29.3	53.0	34.5	50.5	33.5	47.3	25.4

Climatological Data for November, 1910.

DISTRICT No. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Temperature conditions were moderate during the first few days of the month. A cool wave overspread the district from the 4th to 7th, giving frosts to the Gulf coast in Louisiana on the latter date, and there was another cool wave of moderate intensity from the 15th to 18th. From the 22d to 27th unseasonably high temperatures prevailed, but from the 28th to 30th there was a third cool period of marked intensity, which gave freezing temperatures and killing frosts to the Gulf coast.

There were three well defined periods of precipitation over the greater portion of the district, namely, 3d to 6th, 14th to 20th, and 25th to 28th. The precipitation was generally light and scattered, being below the normal, except over a few localities in Colorado, Louisiana, and Mississippi, where the amounts were slightly above the average. Over those portions of the district west of the Mississippi River and north of the thirty-third parallel, the amounts were very small, and many localities in Oklahoma and in the Kansas, Texas, and New Mexico areas received either no rain, or only a trace. The drought was severe at the close of the month in parts of Oklahoma and Kansas, and farming operations were materially interfered with.

TEMPERATURE.

Mean temperatures for the month were from 0.1° to 5.7° above the normal, except over small parts of Arkansas and Louisiana, and in the Missouri, Tennessee, and Mississippi areas, where there were deficiencies ranging from 0.1° to 3.3°. The maximum temperature reached, or exceeded, 80° in all States, or areas, and 85°, or higher, was recorded in many localities. The highest temperatures were experienced in Oklahoma, Arkansas, Louisiana, and the Colorado, Texas, and Mississippi areas, where they were above 86° at many stations. The highest temperature recorded was 98°, at Ruston, La. Minimum temperatures for the month were generally below freezing, except on the immediate Gulf coast, where they were near 35°. The lowest temperatures were below 20° generally over the northern portion of the district. The lowest temperature recorded was −4°, at Hoehne, Colo., and minimum temperatures of 5° were recorded at Leadville, Colo., and Elizabethtown, N. Mex. Freezing temperatures occurred nearly to the Gulf coast, in Louisiana, during the last three days of the month. Monthly mean temperatures and departures from the normal for the various States and parts of States are reported as follows: Colorado area, 41.5°, +4.5°; New Mexico area, 45.8°, +3.2°; Texas area, 54.8°, +2.1°; Kansas area, 46.1°, +2.0°; Oklahoma, 51.4°, +1.3°; Missouri area, 45.4°, +2.1°; Tennessee area, 47.0°, −1.9°; Arkansas, 51.5°, +0.5°; Mississippi area, 53.3°, −1.0°; Louisiana, 59.5°, +0.7°.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Very little precipitation occurred in this drainage area. The amounts of precipitation and departures from the normal for the several portions of this basin differ materially. Over the headwaters of the Arkansas River, in Colorado, the average precipitation from 29 stations was 0.49 inch, being about 0.2 inch below the normal. Over the stretches of the Arkansas Valley proper that lie in Kansas and Oklahoma, the amounts from 28 stations averaged 0.05 inch, being 1.33 inches below the normal. The average for the Cimarron Valley was 0.04 inch and the deficiency amounted to about 1.3 inches. The precipitation from 62 stations in the Canadian Valley averaged 0.21 inch. Over those portions of this valley that lie in New Mexico and Texas, the deficiency averaged about half an inch and over the portion that lies in Oklahoma about 2 inches. In the Verdigris Valley, the precipitation averaged about 0.02 inch, the deficiency being about 1.7 inches. In the Neosho Valley, the average from 18 stations was 0.07 inch, being about 2 inches below the normal. Over that portion of the Arkansas Valley below the Oklahoma-Arkansas line, the average precipitation from 15 stations was 0.40 inch, being about 3 inches below the normal.

Red River and tributaries.—There was very little precipitation over those portions of the Red River Basin that lie in New Mexico, Texas, and Oklahoma, the amounts from 39 stations averaging 0.27 inch, about 1.6 inches below the normal. Below the Texas-Arkansas line, the precipitation was heavier; the amounts from 16 stations in Arkansas and Louisiana averaged 1.65 inches, being about 2.3 inches below the normal.

Mississippi south of St. Louis and small tributaries.—Only 3 stations in this drainage area reported more than the normal amount of precipitation, and, generally, the precipitation and departures from the normal differ materially for the various basins. In the immediate Mississippi Valley, the amounts from 51 stations averaged 1.41 inches, being about 2.7 inches below the normal. Over the valley of the Meramec, the precipitation averaged about one-third of an inch and the deficiency was about 2.5 inches. The precipitation was uniformly light over the White River Valley; the amounts from 21 stations averaged 0.36 inch, being about 3 inches below the normal. The precipitation was unevenly distributed over the Yazoo Valley, the average from 31 stations being 1.07 inches, about 2.7 inches below the normal. Heavier precipitation occurred over the Valley of the Big Black, where the average was 2.49 inches, and the deficiency was about 0.6 inch. The precipitation from 19 stations in the Ouachita Valley averaged 0.98 inch, being about 3.2 inches below the normal.

Louisiana coastal plain.—More than the normal amount of precipitation occurred over the northeastern portion of this area and there was less than the normal elsewhere. The average from 29 stations was 2.79 inches, being about half an inch below the normal.

Monthly precipitation and departures from the normal for the various States and parts of States are reported as follows: Colorado area, 0.46, −0.19; New Mexico area, 0.24, −0.45; Texas area, 0.45, −1.58; Kansas area, 0.50, −1.20; Oklahoma, 0.12, −1.90; Missouri area, 0.39, −2.80; Tennessee area, 0.93, −3.63; Arkansas, 0.47, −3.30; Mississippi area, 1.63, −1.59; Louisiana, 2.89, −1.00.

SNOWFALL.

General snows occurred over the Colorado and New Mexico areas. The amounts ranged from a trace to 27.3 inches at ordinary elevations, and owing to the warm weather this disappeared rapidly. Light snows occurred in parts of Oklahoma, and the Kansas, Texas, Missouri, and Tennessee areas. The average snowfall, in inches, for the various States and areas derived from the reports of such stations as reported snow, is as follows: Colorado area (31 stations), 5.6; New Mexico area (32 stations), 2.1; Texas area (9 stations), 1.6; Kansas area (25 stations), 0.4; Oklahoma (7 stations), 0.9; Missouri area (13 stations), 0.1; Tennessee area (8 stations), trace; Arkansas (1 station), 0.5.

RIVERS.

In Oklahoma the larger streams were at unusually low stages and many smaller tributaries were dry.

Low water continued in the Red River and changes were slight.

No material change occurred in the stage of the Arkansas during the month. At Little Rock, a stage of 0.7 foot below the zero was recorded on the 25th, which is the lowest recorded since observations began 31 years ago. Navigation was suspended during the month.

Low stages were recorded generally in the White River, but the stream was navigable in its lower reaches.

Only slight changes occurred in the Ouachita and low water continued during the month.

Below St. Louis the Mississippi fell slowly and low stages prevailed generally at the close of the month.

NOTES.

Colorado (F. H. Brandenburg, Section Director).—The weather during the month was unusually warm throughout the entire area, and at some stations the mean temperature was the highest of record for the month of November.

New Mexico (Charles E. Linney, Section Director).—This was one of the warmest Novembers of record, only 1897, with 46.5°, and 1901, with 46.4°, were warmer during the last 16 years.

Rociada, N. Mex. (Jose A. Baca).—Exceedingly dry weather prevailed for this season of the year. The snow has melted considerably on the main range, keeping streams quite full.

Tulia, Tex.—The ground is very dry and fall plowing is at a standstill.

Winfield, Tex.—The weather has been dry and water is scarce.

Kansas (T. B. Jennings, Section Director).—November was moderately warm and exceedingly dry, being the driest month experienced since the organization of the section in 1887. This was the eighth month this year with less than the normal precipitation and the accumulated deficiency is 9.85 inches.

Oklahoma (J. P. Slaughter, Section Director).—The precipitation was the lightest of record for November and that of the last three months has been much the lightest of any autumn during the last 20 years. The average for the last three months amounts to 2.43 inches as compared with a normal for the same period of 7.51 inches. This marked deficiency following the comparatively light rain of last summer has resulted in probably the most prolonged and acute drought condition that has been experienced since the country was opened for settlement in the spring of 1889. A considerable portion of the contemplated winter wheat acreage has not been seeded on account of the dry soil, and much of the wheat that has been sown has not come up, and the stand is probably the poorest in the history of the State.

Blandville, Ky.—Hailstones the size of guinea eggs fell on November 27, between 3 p. m. and 4 p. m., breaking windows.

Tennessee (Roscoe Nunn, Section Director).—The 27th was marked by warm, storm conditions, with thunderstorms and light hail at several stations.

Arkansas (H. F. Alciatore, Section Director).—This was the driest November experienced in Arkansas since observations began. There were 30 stations that received less than one-half inch of precipitation, and in Lonoke and Howard counties the amounts were inappreciable.

Mississippi (J. H. Scott, Section Director).—In only four instances during the last 22 years has the average precipitation for November been lighter than that of the current month.

The following information concerning drainage operations in Leflore County, Miss., was furnished by Mr. J. Obergfell, of Itta Bena: In the Ellsberry District, near Schlater, there are 6 miles of main canal and 5 miles of laterals, constructed at a cost of $28,000 and draining 6,000 acres of land. In the Second District, located in the northern part of the county, 4,000 acres of land are drained by 5½ miles of main canal and 2 miles of laterals, constructed at a cost of $13,000. Work was completed on those two projects during 1909.

In the Third, or Lake Henry District, situated in the central part of the county, the right of way is cleared for the construction of 8 miles of main canal and 3½ miles of laterals, that will benefit 5,000 acres of land, 2,000 acres of which will be reclaimed from a swampy condition. The cost will be $36,000 and the work will probably be completed during 1911. Work has commenced in the Cude Drainage District, where 3,000 acres will be reclaimed and 15,000 acres benefited. The cost will be $75,000 and the time allowed for completion is 16 months. There will be 9½ miles of main canal and 12½ miles of laterals.

THE DROUGHT OF 1910 IN KANSAS.

By S. D. FLORA, Observer, Weather Bureau.

Southern Kansas is passing through one of the most severe droughts since authentic records were begun in the State. The average deficiency in precipitation since the first of the year has been unprecedented in the valleys of the Neosho and Verdigris rivers and in the country along the Arkansas River from Great Bend to the Oklahoma line. In south-central Kansas and the upper valley of the Arkansas west of the Great Bend, but one year, 1893, has averaged drier than the present one.

Over the southern half of the State (District No. 7 in Kansas) the precipitation has averaged below normal for 8 of the past 11 months, resulting in a deficiency of 9.85 inches, or 34 per cent. March and November were the driest months of those names on record and June and October were each, with one exception, the driest months of those names on record.

In Chautauqua County the precipitation has been below normal since the beginning of the year. In Harper County, where the percentage of deficiency was greatest, but 46 per cent of the normal amount has been received.

With the exception of fall pastures and winter wheat the drought has not resulted in much damage to crops, as the precipitation was above normal in May and August.

The serious problem of the drought has been that of securing sufficient water supply for the cities of the Neosho and Verdigris valleys.

Though there is no authentic record of stream flow during past years in this region, it is the consensus of opinion that the streams are at the lowest point in 30 years and wells have failed that have never before been known to go dry. At Coffeyville the discharge of the Verdigris River at the middle of November was less than 10 cubic feet per second, and the disposal of city sewage and industrial waste from oil refineries and strawboard factories along the river was a grave question. The supply of water for fire protection was inadequate in a number of cities.

Conditions were much better in the Arkansas Valley west of Wichita, as the deep wells in this part of the country are fed by the "underflow," a subterranean sheet of water that is never perceptibly affected by a drought. The Arkansas River west of the Great Bend was practically dry during September and October, but below the Great Bend it has not been unusually low, as the supply of water here was largely furnished by the "underflow."

TABLE 1.—*Climatological data for November, 1910. District No. 7, lower Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Colorado.																			
Blaine	Baca	3,935	18	46.4	+ 3.7	80	3†	14	28	51	T.	− 0.52	T.	T.	0	17	8	5	sw.	M. M. Myers.
Buena Vista	Chaffee	7,955	10	37.0	.....	59	5	14	20	41	0.45	+ 0.04	0.45	4.5	1	.....	.....	.....	w.	C. A. Short.
Calhan	El Paso	6,700	3	40.6	.....	70	3	16	27	39	0.61	.....	0.25	5.5	3	20	4	6	sw.	H. B. Rice.
Canon City	Fremont	5,329	22	46.5	+ 4.1	79	25	22	28	46	1.02	+ 0.57	0.38	9.0	5	.....	.....	.....	.....	G. C. Sherwood.
Colorado Springs	El Paso	6,098	30	43.3	+ 5.8	72	3	19	28†	44	0.29	− 0.06	0.17	2.6	3	17	5	8	.....	Colorado College.
Cripple Creek	Teller	9,396	9	.....	.....	.....	.....	.....	.....	.....	0.66	+ 0.27	0.38	7.8	3	.....	.....	.....	.....	F. G. Willis.
Cuchara Camps	Huerfano	8,200	.....	.....	.....	.....	.....	.....	.....	.....	0.49	.....	0.33	6.0	2	24	5	1	sw.	Geo. A. Mayes.
Eads	Kiowa	4,209	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Lauck.
Fairview	Custer	9,500	1	.....	.....	.....	.....	.....	.....	.....	1.11	.....	0.81	17.0	3	14	16	0	e.	Elizabeth L. Gray.
Florence	Fremont	5,185	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. G. Fish.
Fremont	El Paso	8,850	.....	36.0	.....	62	3	9	27	32	0.53	.....	0.17	6.4	5	8	8	14	w.	U. S. Forest Service.
Garfield	Chaffee	9,510	.....	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.46	8.0	5	22	3	5	.....	Lloyd N. Felton.
Glen Eyrie	El Paso	6,500	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Calixto Bertolotti.
Hamps	Elbert	5,400	17	40.6	+ 4.6	76	3	10	28	53	0.11	− 0.14	0.06	1.3	3	20	4	6	s.	W. Hamp.
Hermit Lake	Custer	10,000	.....	.....	.....	.....	.....	.....	.....	.....	1.26	.....	0.49	15.0	3	11	15	4	sw.	John E. Graham.
Hoehne	Las Animas	5,700	18	47.8	+ 7.2	88	3†	13	17	63	0.22	− 0.46	0.22	T.	1	17	5	8	n.	S. W. DeBusk.
Holly	Prowers	3,380	15	44.6	+ 1.5	83	25	13	28	58	0.11	− 0.56	0.11	0.8	1	27	3	0	se.	Holly Sugar Co.
Lake Moraine	El Paso	10,265	16	31.4	+ 2.0	52	3	− 4	27	39	0.75	− 0.12	0.22	12.8	7	8	13	9	sw.	Clyde C. McReynolds.
Lamar	Prowers	3,592	20	46.0	+ 3.7	80	12	14	30	55	0.10	− 0.40	0.10	1.0	1	26	3	1	.....	J. T. Lawless.
Las Animas	Bent	3,899	42	45.0	+ 6.7	83	3	15	28†	57	0.39	+ 0.08	0.28	0.0	2	21	1	8	ne.	F. M. Tague.
La Veta Pass	Costilla	9,000	.....	.....	.....	.....	.....	.....	.....	.....	1.30	.....	0.80	8.2	5	17	8	5	w.	Norman R. Lively.
Leadville	Lake	10,248	14	30.8	+ 3.4	52	11†	5	20	29	0.55	− 0.21	0.30	7.3	8	11	10	9	.....	U. S. Weather Bureau.
Limon (near)	Elbert	5,360	3	41.0	.....	76	3	6	28	48	T.	.....	T.	T.	0	15	12	3	s.	John Lesher.
Madrid	Las Animas	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.23	.....	0.11	1.7	3	.....	.....	.....	.....	Thos. Sawyers.
Marshall Pass	Saguache	10,846	7	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.21	19.0	7	17	10	3	w.	W. D. Lillard.
North Lake	Las Animas	8,700	.....	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.19	3.9	3	22	3	5	nw.	James W. Ingmire.
Pueblo	Pueblo	4,734	22	45.0	+ 5.7	78	3	16	28	54	0.53	+ 0.20	0.23	2.4	6	15	9	6	nw.	U. S. Weather Bureau.
Rocky Ford (near)	Otero	4,177	21	44.3	+ 4.6	81	3	16	30	59	0.43	− 0.06	0.18	T.	3	20	7	3	w.	P. K. Blinn.
St. Elmo	Chaffee	9,500	.....	.....	.....	.....	.....	.....	.....	.....	0.43	.....	0.21	5.5	3	15	13	2	nw.	Daniel Clark.
Salida	do	7,035	12	41.1	+ 3.6	66	3	15	18†	43	0.35	− 0.42	0.35	2.0	1	25	2	3	w.	M. D. L. Buell.
Sheridan Lake	Kiowa	4,065	9	44.2[d]	.....	78	7	10	26	63[d]	0.20	.....	0.20	3.0	1	.....	.....	.....	.....	Howard Gamble.
Stonewall	Las Animas	8,000	4	.....	.....	.....	.....	.....	.....	.....	0.26	.....	0.12	3.5	4	20	8	2	.....	J. W. Shouse.
Trinidad	do	5,994	14	.....	.....	.....	.....	.....	.....	.....	0.10	− 0.81	0.10	1.0	1	21	5	4	.....	Mrs. Mattie Butler.
Victor (near)	Teller	10,100	6	38.8	.....	59	3†	19	15	25	0.48	.....	0.24	8.0	3	25	3	2	e.	Fred. Jones.
Vilas	Baca	3,935	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Carrie Konkel.
Westcliffe	Custer	7,864	16	38.8	+ 6.5	67	6†	12	18	50	0.28	− 0.67	0.20	4.5	3	12	12	6	nw.	Zack Jordan.
Winfield	Chaffee	9,765	.....	.....	.....	.....	.....	.....	.....	.....	0.41	.....	0.16	4.9	8	4	24	2	w.	John G. Payne.
Wortman	Lake	11,250	9	.....	.....	.....	.....	.....	.....	.....	1.27	.....	0.39	27.3	8	1	28	1	nw.	Geo. C. Wortman.
New Mexico.																				
Abbott	Mora	5,771	1	.....	.....	74	3	18	28	52	0.54	.....	0.54	6.0	1	18	7	5	s.	El Paso & Southwest. R. R.
Albert	Union	4,700	19	52.1	+ 5.0	80	8	24	30	48	0.26	− 0.48	0.26	T.	2	20	8	2	w.	Andrew Knell.
Arch (near)	Roosevelt	4,634	1	.....	.....	71	8	15	21	48	0.28	.....	0.28	0.0	1	25	0	5	n.	Wm. A. Elliott.
Aurora	Colfax	8,849	1	.....	.....	.....	.....	.....	.....	.....	0.39	.....	0.28	6.0	2	5	23	2	nw.	Miss Juanita Lucero.
Bell Ranch	San Miguel	4,500	11	48.8	.....	81	12	21	28†	51	0.26	− 0.82	0.19	.....	2	23	2	5	s.	C. M. O'Donel.
Black Lake	Colfax	8,348	1	.....	.....	.....	.....	.....	.....	.....	0.31	.....	0.31	.....	1	12	16	2	w.	Ralph T. Martinez.
Cabeza	San Miguel	5,406	1	.....	.....	.....	.....	.....	.....	.....	0.16	.....	0.10	1.0	2	15	13	2	se.	El Paso & Southwest. R. R.
Campana	do	4,493	1	.....	.....	.....	.....	.....	.....	.....	0.14	.....	0.14	.....	1	11	15	4	w.	Do.
Chacon	Mora	9,000	1	.....	.....	.....	.....	.....	.....	.....	0.81	.....	0.81	7.0	2	17	13	0	w.	Alfredo Lucero.
Cimarron (near)	Colfax	6,385	6	43.5	.....	75	8	12	28	52	0.24	.....	0.13	1.2	2	17	7	6	e.	Wm. French.
Clayton	Union	5,178	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. W. W. Chilton.
Clovis	Curry	4,129	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Mendenhall.
Cuervo	Guadaloupe	4,849	1	51.8	.....	76	24	24	30	38	0.38	.....	0.32	0.0	3	20	8	2	s.	El Paso & Southwest. R. R.
Dawson	Colfax	6,396	1	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	2.0	1	9	14	7	.....	Do.
Dorsey	do	6,000	7	44.6	.....	74	12	15	28	51	0.14	.....	0.07	1.5	2	21	4	5	sw.	Geo. T. Lambert.
Elizabethtown	do	8,465	4	34.2	.....	63	8†	5	27	51	0.17	.....	0.07	1.8	3	24	1	5	nw.	Miss Mabel Carrington.
Folsom	Union	6,399	10	44.2	+ 4.7	75	12	17	17†	49	0.12	− 0.80	0.11	1.0	2	24	3	3	sw.	David Rope.
Fort Union	Mora	6,835	50	42.8	+ 2.4	73	9	12	30	51	0.38	− 0.32	0.21	5.0	2	27	0	3	.....	M. C. Needham.
Hayden	Union	4,444	1	47.3[a]	.....	75	21	20	30	49[a]	0.20	.....	0.12	2.5	4	22	6	2	sw.	Geo. L. Cook.
Johnsons Park	Colfax	6,722	1	.....	.....	.....	.....	.....	.....	.....	0.11	.....	0.07	1.2	2	21	4	5	sw.	A. J. Meloche, jr.
Kappus	Quay	4,000	.....	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.10	0.0	1	.....	.....	.....	.....	Anthony Kappus.
Lake Alice	do	7,160	1	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.05	2.0	2	.....	.....	.....	.....	Raton Water Co.
Logan	do	3,851	4	48.7[i]	.....	80	3†	17	30	57[i]	0.00	.....	0.00	0.0	0	23	3	4	sw.	John B. Reneau.
Los Alamos	San Miguel	6,789	5	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.15	4.0	2	.....	.....	.....	.....	Wm. Frank, sr.
Lykins (near)	Roosevelt	5,000	.....	.....	.....	.....	.....	.....	.....	.....	0.05	.....	0.05	0.5	1	22	6	2	sw.	J. G. Buchanan.
Maxwell (near)	Colfax	5,894	3	.....	.....	.....	.....	.....	.....	.....	0.29	.....	0.23	2.2	2	.....	.....	.....	.....	D. N. Jackson.
Melrose	Curry	4,400	2	.....	.....	.....	.....	.....	.....	.....	0.19	.....	0.19	T.	2	.....	.....	.....	.....	Dr. B. M. Porter.
Miami Ranch	Colfax	6,000	2	44.2	.....	73	8	15	30	47	0.34	.....	0.25	4.5	2	23	2	5	w.	Farmers' Devel. Co.
Montoya	Quay	4,335	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	El Paso & Southwest. R. R.
Mount Dora (near)	Union	5,600	.....	.....	.....	.....	.....	24	30	.....	0.13	.....	0.08	2.0	3	21	6	3	w.	Edward F. Grygla.
Nara Visa	Quay	4,225	4	49.6[h]	.....	78	3	23	28	42[h]	T.	.....	T.	0.0	0	26	2	2	s.	Willard Beiknap.
Optimo (near)	Mora	6,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. K. Odell.
Pasamonte	Union	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	T.	0	19	7	4	w.	J. J. Heringa.
Raton	Colfax	6,660	12	45.1	+ 1.3	76	3	19	30	48	0.35	− 0.08	0.30	3.5	2	23	2	5	w.	Prof. R. C. Crum.
Raciada	San Miguel	8,200	6	40.1[f]	.....	72	12	18	8	51[h]	0.18	.....	0.18	2.0	2	9	20	1	w.	Jose A. Baca.
Rosebud	Union	4,500	.....	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.08	T.	1	.....	.....	.....	.....	M. T. Nix.
Roy	Mora	5,884	1	.....	.....	.....	.....	.....	.....	.....	0.19	.....	0.10	2.0	2	20	7	3	sw.	El Paso & Southwest. R. R.
San Jon	Quay	4,200	3	50.1	.....	81	12	18	30	46	0.08	.....	0.08	T.	1	23	3	4	sw.	Jesse T. White.
Solano (1)	Mora	5,622	1	45.0	.....	74	8	20	28†	44	0.47	.....	0.25	5.5	3	23	2	5	sw.	F. M. Hughes.
Springer	Colfax	5,857	14	42.8	+ 2.5	80	1	11	5	61	0.35	− 0.19	0.25	4.0	2	26	2	2	.....	Atchison, Topeka & S. F. R.
Taylor	do	5,661	.....	.....	.....	.....	.....	.....	.....	.....	0.45	.....	0.33	4.5	3	18	9	4	sw.	El Paso & Southwest. R. R.
Trementina	San Miguel	5,000	2	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.25	0.0	2	21	4	5	sw.	Miss Alice Blake.
Tucumcari	Quay	4,194	5	51.6	.....	81	12	22	30	47	0.22	.....	0.22	T.	1	27	2	1	sw.	John F. Seaman.
Valley	Union	5,000	5	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	T.	0	22	5	3	s.	Mrs. M. Letitia Payne.
Vermejo Park	Colfax	7,600	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. W. Adams.
Wagon Mound (near)	Mora	6,300	1	42.8	.....	73	3†	14	28	50	0.39	.....	0.25	4.5	2	22	2	6	se.	Guy L. Barnes.
Texas.																				
Amarillo	Potter	3,676	18	48.9	+ 5.1	82	12	24	30	39	0.28	− 0.88	0.27	2.7	2	23	6	1	s.	U. S. Weather Bureau.
Archer City	Archer	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.99	.....	0.85	0.0	2	25	0	5	s.	Chas. H. Thuman.
Arthur City	Lamar	590	18	.....	.....	.....	.....	.....	.....	.....	0.40	− 2.59	0.20	0.0	2	22	3	5	.....	J. B. Wheeler.
Bonham	Fannin	566	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. S. Lovelace.
Canadian	Hemphill	2,339	3	50.8	.....	83	12	20	28	44	0.01	.....	0.01	0.1	1	18	8	4	s.	Canadian Academy.
Childress	Childress	1,869	17	.....	.....	.....	.....	.....	.....	.....	T.	− 1.08	T.	0.0	0	16	10	4	s.	W. E. Davis.
Chillicothe	Hardeman	1,406	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. B. Connor.
Clarendon	Donley	2,719	5	52.0	.....	85	13	23	16†	48	0.25	.....	0.25	0.0	1	25	2	3	se.	J. B. McClelland.
Clarksville	Red River	442	18	56.7	+ 0.5	83	13†	28	28†	43	0.00	− 3.46	0.00	0.0	0	27	2	1	.....	J. W. O'Neill.
Claude	Armstrong	3,397	5	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	Ft. Worth & Denver Cy. Ry.
Dalhart	Dallam	3,998	5	45.4	.....	80	13	14	30	51	0.00	.....	0.00	0.0	0	25	2	3	sw.	F. L. Kennard.

TABLE 1.—*Climatological data for November, 1910. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Texas—Continued.																		
Denison	Grayson		2								0.73		0.72	0.0	2	13	7	10	n.	J. B. Gibson.
Finley	Bowie										1.30		1.30	0.0	1	12	2	16	e.	Mrs. M. C. Myers.
Henrietta	Clay	915	18	55.4	+ 2.4	85	13	25	28†	45	1.12	− 0.96	1.12	0.0	1	15	3	12	s.	C. K. Brown.
Hereford	Deaf Smith	3,750	5																	A. C. Elliott.
Lewis Ferry	Bowie		1								0.06		0.06	0.0	1	16	4	10		P. G. Ruff.
Memphis	Hall	2,067	5	46.6		74	2†	26	16†	42	0.00		0.00	0.0	0	19	6	5		Ft. Worth & Denver Cy. Ry.
Miami	Roberts	2,743	4	51.1		82	12	22	30	45	0.01		0.01	T.	1	23	6	1	s.	J. E. Kinney.
Mobeetie	Wheeler		16								T.	− 1.18	T.	T.	0	16	9	5	s.	R. A. Choate.
Nazareth	Castro		4			78	13†				0.44		0.38	0.0	2	25	3	2	w.	Rev. P. A. Kaelin.
Ochiltree	Ochiltree		2								0.20		0.20	2.0	1					S. J. Allen.
Pampa	Gray	3,220	1	52.0		87	12	20	28	52	0.00		0.00	0.0	0					B. E. Finley.
Paris	Lamar	592	21	55.8	+ 1.3	84	13†	28	29	49	0.12	− 2.72	0.11	0.0	2	16	4	10	n.	Robert A. Miller.
Plemons	Hutchinson		3	46.8		81	12†	14	28	55	0.18		0.18	2.0	1	23	4	3	sw.	C. S. Solomon.
Quanah	Hardeman	1,563	5	53.6		81	27	31	30	38	T.		T.	0.0	0	29	0	1	s.	Wm. H. Crawford.
Ringo Crossing	Hopkins										0.00		0.00	0.0	0	17	0	13	nw.	H. J. Palmer.
Romero	Hartley			43.7		79	12	12	30	48	0.12		0.12	1.2	1	13	15	2		R. S. Chamberlain.
Sherman	Grayson	745	17																	R. A. Gibbs.
Sulphur Springs	Hopkins	530	18																	O. M. Pate.
Texline	Dallam	4,694	5					10	28†		0.40		0.25	4.5	3					Ft. Worth & Denver Cy. Ry.
Tulia	Swisher	3,501	12	47.2		81	12	17	30	48	0.51	− 1.29	0.51	T.	1	12	16	2	ne.	Lou Mulhall.
Winfield	Titus										0.33		0.19	0.0	2	13	13	4	nw.	J. C. Bostick.
Kansas.																				
Alden	Rice	1,684									0.00		0.0	0.0	0	19	0	7	ne.	Percy Torrey.
Anthony	Harper	1,329	13	47.5		82	12	15	28	45	T.	− 0.98	T.	T.	0	11	15	4	sw.	R. H. Beebe.
Ashland	Clark	1,951	22	46.5	+ 3.2	85	25	11	28	60	0.06	− 0.76	0.06	T.	1	14	13	3	sw.	C. W. Carson.
Burlington	Coffey	1,010	17	44.7	+ 0.4	76	8	12	28	42	T.	− 1.31	T.	0.0	0	20	9	1	s.	O. E. Sanford.
Chanute	Neosho	940	6	46.7		77	8	20	28	39	T.		T.	0.0	0	14	16	0	nw.	Chase W. Brown.
Cimarron	Gray	2,700	4	42.8[b]		79	26	14	28	48[b]	0.10		0.10	1.0	1	11	10	1	se.	Fred Mallonee.
Coldwater	Comanche	2,090	13	47.6	+ 3.8	82	25	17	28	44	0.02	− 0.71	0.02	T.	1	23	4	3	s.	J. L. Stanley.
Columbus	Cherokee	898	20	46.6	+ 1.1	73	8†	19	28	38	0.04	− 2.29	0.03	T.	2	20	8	2	sw.	O. E. Skinner.
Coolidge	Hamilton	3,348	13	43.4	+ 3.3	83	25	11	28	57	0.22	− 0.32	0.20	2.2	2	22	6	2	se.	W. R. Padley.
Cottonwood Falls	Chase	1,234	6	45.5		78	8†	13	28	46	0.05		0.05	0.0	1	20	6	4	n.	E. B. Greene.
Council Grove	Morris	1,234	1	44.6		80	26	14	28	50	0.25		0.25	0.0	1	22	6	2	w.	Jas. Sharpe.
Cunningham	Kingman	1,680	26	48.9	+ 2.7	87	7†	13	28	49	0.02	− 0.81	0.02	0.2	1	20	8	2	ne.	W. H. Morton.
Dodge City	Ford	2,513	36	45.8	+ 5.3	80	26	17	28	45	0.02	− 0.53	0.02	T.	1	15	11	4	n.	U. S. Weather Bureau.
Eldorado	Butler	1,291	8	46.6		78	26	14	28	47	T.		T.	0.0	0	26	4	0	sw.	W. Y. Miller.
Ellinwood	Barton	1,790	35	45.4	+ 3.0	81	26	12	28	45	T.	− 0.85	T.	0.0	0	7	23	0	ne.	Martin Musil.
Emporia	Lyon	1,138	29	45.6	+ 1.9	80	22	18	28	45	0.10	− 1.19	0.10	0.0	1	17	9	4	n.	W. H. Boyles.
Eureka	Greenwood	1,412	14	46.0		78	8	16	28	48	0.02	− 1.78	0.02	0.0	1	20	8	2	nw.	T. C. Peffer.
Fall River	do.	925	14	47.2[f]	+ 1.3	79	7	18	19	49[f]	T.	− 1.79	T.	0.0	0	15	8	0	n.	J. McDaniel.
Fargo	Seward		1																	Ray Swink.
Fredonia	Wilson	864	7	48.2		75	7†	17	28	39	0.05		0.04	0.0	2	22	6	2	nw.	B. W. Holmes.
Garden City	Finney	2,836	21	43.9	+ 0.9	80	26	11	28	53	0.15	− 0.49	0.15	1.0	1	19	8	3	s.	B. F. Stocks.
Great Bend	Barton	1,850	1																	Isaac Pritchard.
Greensburg	Kiowa	2,235	3	47.2		79	26	14	28	47	T.		T.	T.	0	23	2	5	s.	C. C. Raymond.
Grenola	Elk	1,116	23	46.2	+ 1.2	79	26	16	28	46	0.03	− 1.72	0.03	0.0	1	20	9	1	s.	R. M. Lawyer.
Howard §	do.	1,112	3								T.		T.	0.0	0	18	7	5	n.	J. W. Eby.
Hugoton	Stevens		6	45.6		85	25	12	28	59	0.05		0.05	0.5	1	20	8	2	s.	E. M. Anderson.
Hutchinson	Reno	1,535	20	45.8	+ 0.9	81	26	10	28	48	0.01	− 0.71	0.01	0.0	1	24	4	2	sw.	E. S. Webster.
Independence	Montgomery	816	37	48.4	+ 2.4	77	8	17	28	46	0.01	− 1.93	0.01	0.0	1	20	5	5	n.	F. L. Kenoyer.
Iola	Allen	984	4	45.0	+ 2.0	75	8	20	28	36	0.05	− 1.33	0.05	T.	1	14	13	3	n.	U. S. Weather Bureau.
Irene	Hamilton	3,440		45.0		86	25	10	28	61	0.25		0.23	1.0	2	16	8	6	nw.	N. M. Herbig.
Jetmore	Hodgeman	2,268	9	45.5		80	25	12	28	48	T.		T.	T.	0	5	22	3	nw.	James Aiken.
Kingman	Kingman	1,504	2	47.1		80	26	13	28	45	0.03		0.03	T.	1	9	19	2	se.	B. B. Anawalt.
La Crosse	Rush	2,061	8	44.6		83	8	13	28	50	T.		T.	T.	0	21	5	4	sw.	Rodney Torrey.
Lakin	Kearny	2,960	20	43.2	+ 0.9	76	25	9	28	48	0.18	− 0.34	0.18	2.0	1	23	6	1	ne.	C. H. Longstreth.
Larned	Pawnee	2,090	25	45.8		81	26	14	28	45	0.00	− 0.96	0.00	0.0	0	15	9	6	n.	H. H. Wolcott.
Lebo	Coffey	1,138	24	44.4	+ 1.5	76	8	16	28	38	0.10	− 1.53	0.10	T.	1	19	9	2	nw.	J. J. Bowman.
Le Roy	do.	990	1								0.12		0.12		1	16	6	8	n.	F. W. Schmitt.
Liberal	Seward	2,843	3	46.0[a]		82	25	15	28	52	0.14		0.14	2.0	1	16	4	10	se.	Dr. R. T. Nichols.
Macksville	Stafford	2,032	21	46.0	+ 2.4	81	26	13	28	42	T.	− 0.89	T.	T.	0	10	14	6	n.	Mrs. Nelia Poling.
McPherson	McPherson	1,495	21	44.8	+ 1.6	78	26	13	28	45	0.04	− 0.98	0.04	0.0	1	24	5	1	nw.	Ed. F. Haberlein.
Madison	Greenwood	1,074	9	44.0[d]		77	8	16	19	51[d]	T.	− 1.70	T.	0.0	0	14	10	2	nw.	C. A. David.
Marion	Marion	1,310	17	46.8	+ 2.6	82	3	14	28	45	0.12	− 0.94	0.12	0.0	1	12	18	0	s.	Jerry Forney.
Medicine Lodge	Barber	1,259	17	47.4	+ 1.9	84	6†	13	28	60	T.	− 0.96	T.	T.	0	23	7	0	s.	S. P. Garrison.
Medora	Reno	1,484	1																	M. L. Richenbrode.
Mount Hope	Sedgwick	1,410	13								T.	− 1.27	T.	0.0	0	20	8	2	n.	H. N. Renfrew.
Neosho Rapids	Lyon	1,092	5								0.07		0.07		1	25	0	5	s.	Susan P. Whipple.
Ness City	Ness	2,260	17																	J. K. Barnd.
Newton	Harvey	1,454	13	47.0	+ 1.7	80	26	14	28	46	0.01	− 1.02	0.01	0.0	1	21	9	0	n.	H. A. Brush.
Norwich	Kingman	1,496	14	48.8	+ 2.6	80	26	17	28	41	0.06	− 1.11	0.06	T.	1	17	13	0	se.	N. I. Farris.
Oswego	Labette	899	16	48.4	+ 1.1	75	8†	18	28	40	0.02	− 2.05	0.02	0.0	1	16	13	1	sw.	Jas. M. Currigan.
Plains	Meade	2,766		46.7		80	25	17	28	48	0.07		0.07	T.	1	28	1	1		E. J. Henning.
Pratt	Pratt	1,950	15																	E. H. Ellsworth.
Rome	Sumner	1,218	24	47.7	+ 1.7	81	26	9	28	50	0.10	− 1.12	0.10	T.	1	26	4	0	n.	D. M. Adams.
Sedan	Chautauqua	834	25	48.6	+ 2.6	85	10	18	28	55	0.06	− 1.53	0.06	0.0	1	22	4	4	s.	A. Y. Buckles.
Toronto	Woodson	1,040	13	46.0	+ 0.6	79	8†	16	28	51	0.00	− 1.44	0.00	0.0	0	18	4	8	n.	M. A. Webb.
Ulysses	Grand	3,027	19																	T. W. Marshall.
Walnut	Crawford	940	8	46.4		75	8	19	28†	40	0.04		0.04	0.0	1	23	7	0	sw.	R. C. Harlan.
Wichita	Sedgwick	1,377	23	46.4	+ 2.6	79	26	19	28	38	T.	− 1.18	T.	T.	0	13	13	4	se.	U. S. Weather Bureau.
Winfield	Cowley	1,124	16	47.3	+ 1.2	78	26	14	28	41	T.	− 1.71	T.	0.0	0	26	1	3	n.	M. B. Light.
Yates Center	Woodson	1,068	31	46.1	+ 0.7	77	8	18	29	42	T.	− 1.73	T.	0.0	0	15	14	0	n.	J. W. Tipton.
Oklahoma.																				
Ada	Pontotoc	1,001	3	53.9		82	13†	22	28	41	1.00		1.00	0.0	1	24	0	6	s.	Dr. J. P. McKinley.
Alva	Woods	1,350	6	49.6		84	25†	16	28	54	0.00		0.00	0.0	0	28	2	0	s.	L. W. Sandefur.
Apache	Caddo	1,255	1	52.0		85	26	16	28	55	0.02		0.02	0.0	1	22	7	1	s.	C. D. Teeter.
Arapaho	Custer	1,575	17			84	26				0.00	− 1.54	0.00	0.0	0	26	3	1	n.	Geo. E. Marsh.
Ardmore	Carter	872	9	54.7	+ 0.9	83	13†	26	28	41	0.50	− 2.31	0.50	0.0	1	19	1	10	n.	H. T. Nisbett.
Bartlesville	Washington	687	4	49.4		81	26	21	28	48	0.10		0.10	0.0	1	24	5	1	nw.	Dr. A. P. Owens.
Beaver	Beaver	2,500	14	46.6	+ 2.7	78	8†	15	28	48	0.34	− 0.56	0.34	6.0	1	25	2	3	s.	W. C. Frazer.
Blackburn	Pawnee	800	6	51.6		83	26	14	28	49	T.		T.	0.0	0	21	6	3	s.	J. Landis.
Cache	Comanche	1,350	5	48.6		82	26	16	28	50	0.00		0.00	0.0	0	23	4	3	s.	Frank Rush.
Calvin	Hughes	713	6								0.86		0.86	0.0	1	20	0	10	n.	Thomas Purcell.
Chandler	Lincoln	865	6	49.6	+ 3.3	83	13†	17	29	52	T.	− 1.41	T.	0.0	0	22	0	8	n.	Chas. L. Tuttle.
Chattanooga	Comanche	1,150	5	53.6		85	26	24	21†	47	0.06		0.06	0.0	1	23	5	2	se.	Squire Humble.
Chickasha	Grady	1,091	10								T.		T.	0.0	0					J. C. Good.
Cloud Chief	Washita	1,400	10	52.6	+ 1.7	85	26†	13	28	51	T.	− 2.43	T.	T.	0	21	7	2	n.	J. P. Stutzman.
Dacoma	Woods	1,337	13	49.4	+ 2.0	84	12†	14	28	53	0.00	− 1.24	0.00	0.0	0	15	14	1	n.	R. H. Bruce.

TABLE 1.—*Climatological data for November, 1910. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oklahoma—Continued.																				
Durant	Bryan	643	10	52.4	− 1.4	83	12	27	28†	48	0.72	− 1.67	0.70	0.0	2	18	3	9	n.	Nelson Houk.
Eldorado	Jackson	1,456	4	52.0	.....	84	27	20	30	47	0.09	.....	0.09	0.0	1	15	12	1	ne.	T. W. Lanham.
El Reno	Canadian	1,400	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Pearl Maddox.
Enid	Garfield	1,269	11	49.2	.....	83	12	15	29	53	0.00	.....	0.00	0.0	0	26	2	2	n.	Url. B. Worcester.
Erick	Beckman	2,058	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. W. Hanes.
Fairland	Ottawa	839	11	50.6	+ 0.5	80	1†	17	28	51	0.02	− 2.94	0.02	0.0	1	7	17	6	s.	C. W. Prior.
Fort Gibson	Muskogee	556	6	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.06	0.0	2	19	3	8	s.	John T. Welsh.
Frederick	Tillman	1,293	7	53.6	.....	85	26	18	28	45	0.03	.....	0.03	0.0	1	23	5	2	sw.	B. B. Bradley.
Gage	Ellis	2,136	8	46.6	.....	84	12	13	28†	51	0.00	.....	0.00	0.0	0	26	4	0	s.	C. H. Holmes.
Goodwell	Texas	3,300	.....	47.8[d]	.....	82	12	13	30	49	0.05	.....	0.05	0.5	1	22	3	1	s.	S. W. Black.
Guthrie	Logan	1,000	8	53.8	+ 3.1	84	26	14	28	51	T.	− 2.38	T.	0.0	0	22	8	0	s.	G. W. Derrick.
Guymon	Texas	3,133	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Mordt.
Harrington	Roger Mills	2,200	7	50.4	.....	82	26	22	16†	43	0.00	.....	0.00	0.0	0	26	4	0	sw.	T. Compton.
Hartshorne	Pittsburg	700	12	55.3	+ 0.5	83	25	20	6	49	0.29	− 2.72	0.24	0.0	2	24	1	5	s.	Edward Glendenning.
Healdton	Carter	900	17	53.1	+ 0.1	85	13	17	28	49	0.88	− 1.41	0.85	0.0	2	20	7	3	n.	C. H. Heald.
Helena	Alfalfa	1,396	3	49.6	.....	82	26	16	28	44	0.00	.....	0.00	0.0	0	19	9	2	n.	Frank Horsfall.
Hennessey	Kingfisher	1,166	16	50.6[d]	+ 0.7	84	13	15	28	50	0.00	− 1.79	0.00	0.0	0	15	15	0	s.	W. W. Parks.
Hobart	Kiowa	1,396	7	51.7	.....	81	26	19	28	43	0.11	.....	0.11	T.	1	13	15	2	s.	Roy Benedict.
Holdenville	Hughes	900	10	50.6	− 2.0	83	13	22	28	44	0.32	− 2.31	0.32	0.0	1	26	2	2	s.	Miss M. Rutherford.
Hooker	Texas	2,999	5	47.1	.....	84	12†	12	28	58	0.03	.....	0.03	T.	1	19	0	11	s.	H. M. Kelley.
Hurley	Cimarron	3,600	2	43.2	.....	79	3	10	30	50	T.	.....	T.	T.	0	13	12	5	sw.	C. W. Meyers.
Idabel	McCurtain	474	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. L. Henderson.
Jefferson	Grant	1,062	17	47.0	+ 0.7	83	26	11	28	53	0.00	− 1.16	0.00	0.0	0	21	7	2	n.	T. E. Beck.
Kenton	Cimarron	4,000	11	48.0	+ 3.4	82	3	15	30	55	0.19	− 0.43	0.06	T.	4	22	3	5	s.	L. A. Wilkoff.
Kingfisher	Kingfisher	1,046	13	52.6	+ 2.8	84	26	14	28	50	T.	− 1.95	T.	0.0	0	20	9	1	s.	J. C. Cross.
McAlester	Pittsburg	698	18	55.4	.....	83	13†	27	6†	41	0.60	− 2.03	0.60	0.0	1	14	11	5	se.	Wm. Noble.
McComb	Pottawatomie	1,200	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jas. E. McNair.
Mangum	Greer	1,585	18	49.3	− 1.4	81	24	21	28	45	0.10	− 1.39	0.10	0.0	1	18	9	3	ne.	M. J. Northcuff.
Marlow	Stephens	1,292	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. B. Anthony.
Meeker	Lincoln	1,030	17	49.6	+ 0.3	85	13	14	28	50	T.	− 2.25	T.	0.0	0	26	1	3	s.	Dr. J. B. Baugh.
Muskogee	Muskogee	614	12	52.6	+ 1.4	84	13	20	28	40	T.	− 2.43	T.	0.0	0	11	7	12	n.	Prof. E. N. Collette.
Mutual	Woodward	.....	4	49.0	.....	84	26	12	28	54	0.00	.....	0.0	0.0	0	26	2	2	n.	Thos. Martin.
Neola	Caddo	1,500	5	54.4	.....	83	26	17	28	50	0.00	.....	0.0	0.0	0	23	6	1	s.	R. N. Schooling.
Newkirk	Kay	1,149	14	51.4	+ 3.6	82	26	15	28	42	T.	− 1.91	0.0	0.0	0	24	4	2	s.	P. H. Albright & Co.
Norman	Cleveland	1,171	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Walter H. Meier.
Oakwood	Dewey	1,854	.....	49.6	.....	80	11†	12	28	46	0.00	.....	0.0	0.0	0	29	1	0	s.	Dr. F. P. Osborn.
Okeene	Blaine	1,194	7	51.4	.....	83	12†	20	16	49	T.	.....	T.	0.0	0	26	4	0	s.	Dr. L. H. Murdoch.
Oklahoma	Oklahoma	1,247	21	51.0	+ 2.1	81	26	22	28	38	T.	− 2.25	T.	0.0	0	21	8	1	s.	U. S. Weather Bureau.
Okmulgee	Okmulgee	752	8	52.8	.....	89	27	19	28†	53	T.	.....	T.	0.0	0	25	4	1	n.	J. L Maynard.
Pauls Valley	Garvin	880	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. Foss.
Pawhuska	Osage	918	12	50.3	+ 3.4	81	26	17	28	45	T.	− 2.00	T.	0.0	0	18	8	4	nw.	R. C. Block.
Perry	Noble	1,060	13	52.1	+ 2.7	83	26	16	28	44	T.	− 2.01	T.	0.0	0	23	5	2	s.	J. A. Douglas.
Ravia	Johnston	796	9	54.7	.....	87	26	22	29	44	0.48	.....	0.36	0.0	3	21	2	7	n.	R. G. Guptill.
Sac & Fox Agency	Lincoln	900	18	52.9	+ 3.1	83	13	20	28	53	T.	− 2.07	T.	0.0	0	26	3	1	n.	D. B. Taylor.
Shawnee	Pottawatomie	1,041	10	49.8	− 1.9	82	13	17	28	46	0.03	− 1.67	0.03	0.0	1	22	5	3	s.	Neal R. Clark.
Snyder	Kiowa	1,356	4	54.0	.....	84	26	17	28	48	0.06	.....	0.06	0.0	1	26	2	2	s.	Dr. W. C. Woodard.
Stillwater	Payne	880	18	49.4	+ 1.2	82	26	18	28	46	0.03	− 1.99	0.03	0.0	1	24	5	1	sw.	J. M. Speidel.
Supply	Woodward	2,100	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. H. Trumbo.
Tulsa	Tulsa	700	22	50.2	.....	84	13	21	28	44	T.	− 2.09	T.	0.0	0	13	15	2	s.	William Hall.
Vinita	Craig	698	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. E. Lahman.
Wagoner	Wagoner	588	14	50.2	+ 0.5	82	13	18	28	40	0.04	− 2.08	0.04	0.0	1	20	3	7	s.	S. L. Hatfield.
Waukomis	Garfield	1,258	14	50.3	+ 0.7	84	26	17	28	47	T.	− 1.63	T.	0.0	0	22	7	1	n.	R. C. Shades.
Waurika	Jefferson	988	.....	54.6	.....	85	13	22	28	40	0.62	.....	0.62	0.0	1	22	4	4	sw.	B. A. Swindler.
Weatherford	Custer	1,639	9	50.6	+ 1.2	83	26	18	28	53	T.	− 1.97	T.	0.0	0	21	7	2	n.	M. D. Reed.
Webbers Falls	Muskogee	479	12	49.7	+ 0.7	84	13	20	29	45	0.10	− 3.03	0.10	0.0	1	16	12	2	n.	B. D. Boulineau.
Whiteagle	Kay	945	5	51.7	.....	82	12	14	28	46	0.00	.....	0.00	0.0	0	24	4	2	s.	J. M. Dankwardt.
Woodward	Woodward	1,886	1	48.5	.....	83	25†	11	28	49	0.00	.....	0.00	0.0	0	25	4	1	s.	R. A. Boyle.
Missouri.																				
Belle	Maries	.....	18	43.6[d]	− 3.0	83	1	20	3†	45	0.47	− 2.10	0.47	0.0	1	9[d]	12[d]	5[d]	nw.[d]	A. J. Wofford.
Birch Tree	Shannon	1,200	17	44.6[e]	− 1.6	76	24	20	3	41	0.78	− 2.28	0.60	T.	2	23[e]	3[e]	3[e]	.....	V. H. Kirkendall.
Cape Girardeau	Cape Girardeau	305	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. L. Albert.
Caruthersville	Pemiscot	.....	20	47.8	− 1.2	80	27	22	3	42	0.55	− 4.14	0.20	T.	5	20	1	9	s.	H. E. Averill.
Dean	McDonald	.....	11	47.9	− 2.3	79	13	16	28	47	0.05	− 3.25	0.05	0.0	1	29	0	1	.....	H. E. Dean.
Doniphan	Ripley	440	6	45.2	.....	77	24	22	3	44	0.87	.....	0.41	T.	4	22	3	5	s.	W. W. Martin.
Farmington	St. Francois	889	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Miss Carrie Sneed.
Gano	Dent	.....	7	44.4	.....	76	9	18	3	39	0.32	.....	0.14	0.5	5	19	7	4	nw.	A. C. Leech.
Goodland	Iron	900	5	41.8	.....	78	9	16	3	49	0.78	.....	0.47	T.	3	22	2	6	n.	F. M. Adams.
Greenville	Wayne	.....	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. G. Templeton.
Hollister	Taney	1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. P. Chapman.
Ironton	Iron	925	32	42.0	− 1.6	74	9†	15	3	49	0.93	− 3.07	0.50	T.	2	12	5	13	n.	W. H. Delano.
Jackson	Cape Girardeau	458	19	44.4	− 1.7	80	27	18	30	41	0.35	− 3.30	0.25	0.0	3	18	4	8	n.	L. M. Bean.
Joplin	Jasper	979	32	50.6	.....	76	13	22	30	37	0.00	− 2.55	0.00	0.0	0	25[e]	0[e]	2[e]	nw.[e]	Miss E. Russum.
Koshkonong	Oregon	911	10	47.6	− 1.8	78	24	23	30	35	0.68	− 2.62	0.27	T.	4	21	5	4	nw.	J. W. Hitt.
Lamar	Barton	964	30	45.5	− 0.9	77	8	20	28†	40	0.10	− 2.10	0.08	T.	2	20	5	5	sw.	E. H. Adams.
Marble Hill	Bollinger	420	19	43.4	− 2.5	78	27	19	19	46	0.44	− 3.01	0.19	0.0	3	10	16	4	n.	A. F. Hemdrix.
Mountain Grove	Wright	1,400	11	44.7	.....	71	9	19	30	34	0.38	− 1.95	0.23	T.	3	11	10	9	nw.	Mo. Fruit Exp. Station.
Mount Vernon	Lawrence	1,480	34	47.6	+ 0.3	78	13†	20	28†	41	0.05	− 2.89	0.05	0.0	1	23	5	2	sw.	C. L. White.
Neosho	Newton	1,023	27	47.3	+ 0.4	79	13	19	28	46	0.13	− 3.00	0.10	0.0	2	25	2	3	sw.	W. O. Buck.
New Madrid	New Madrid	285	16	.....	.....	.....	.....	.....	.....	.....	0.67	− 4.04	0.35	0.0	4	17	2	11	n.	Miss Josie Smith.
Oakfield	Franklin	793	18	43.0	− 3.0	77	9	20	30	36	0.36	− 2.48	0.27	0.0	3	12	12	6	nw.	E. E. Steines.
Olden	Howell	1,246	20	46.2	− 1.2	75	24	20	30	32	0.15	− 3.07	0.10	T.	2	19	9	2	nw.	J. D. Evans.
Perryville	Perry	582	1	47.6	.....	74	25	23	18	34	0.20	.....	0.20	0.0	1	13	0	17	n.	Superintendent of schools.
Rolla	Phelps	1,092	29	44.2	.....	74	9†	18	30	36	0.32	− 2.28	0.18	0.6	3	20	5	5	nw.	Prof. P. J. Wilkins.
Sikeston	Scott	328	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. A. Harrison.
Springfield	Greene	1,350	22	45.0	+ 0.6	73	9	20	28	36	0.14	− 2.50	0.11	T.	3	14	10	6	nw.	U. S. Weather Bureau.
Steelville	Crawford	746	14	43.8[d]	.....	78	8	11	3	49	0.29	− 2.63	0.29	T.	1	12	13	5	nw.	Edwin Pumphrey.
Kentucky.																				
Blandville	Ballard	445	30	45.5	+ 1.2	75	24	25	17†	31	1.43	− 3.03	1.15	T.	3	15	6	9	nw.	E. W. Horr.
Lynnville	Graves	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Scherffius.
Tennessee.																				
Arlington	Shelby	.....	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. T. B. Etheridge.
Bolivar	Hardeman	450	23	45.2	− 3.4	74	27	26	3†	39	1.62	− 2.53	0.62	T.	4	18	1	11	n.	Miss M. A. Smith.
Brownsville	Haywood	361	25	47.2	− 1.1	72	27	29	18†	34	1.49	− 3.08	0.89	T.	2	12	14	4	n.	Miss Hattie M. Moses.
Covington	Tipton	311	23	47.4	− 1.7	73	27	28	30	28	0.91	− 3.63	0.46	T.	2	19	0	11	n.	J. S. Ruffin.
Dyersburg	Dyer	310	27	47.8	− 0.4	78	27	26	30	34	0.40	− 4.73	0.20	T.	2	20	0	10	nw.	Miss M. A. Sinclair.
Jackson	Madison	450	17	46.3	− 3.3	76	26	21	3	44	1.49	− 2.77	0.91	T.	3	11	10	9	nw.	Prof. S. A. Robert.
Kenton	Obion	325	8	47.1	.....	77	27	23	30	36	0.36	.....	0.12	T.	6	16	8	6	n.	G. S. Martin.
Memphis	Shelby	409	30	50.3	− 1.1	74	27	29	30	26	1.04	− 3.55	0.80	0.0	4	16	5	9	sw.	U. S. Weather Bureau.

TABLE 1.—*Climatological data for November, 1910. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Tennessee—Continued.																				
Milan	Gibson	440	27	44.7	− 2.9	74	27	25	30	35	0.57	− 4.74	0.21	0.2	7	11	7	12	n.	O. F. Cantwell.
Trenton	do	345	27	45.9	− 1.7	75	26†	22	3	42	0.90	− 4.02	0.65	T.	2	18	8	4	nw.	Prof. F. L. Dennison.
Union City	Obion	360	12	47.9[d]	− 1.7	73	27	23	3	37[e]	0.54	.....	0.30	0.0	3	12	16	2	.....	J. B. Kinsey.
Arkansas.																				
Alicia	Lawrence	.....	6	47.6[d]	.....	75	.....	24	.....	42[d]	0.55	.....	0.55	0.0	1	.....	.....	.....	.....	McCullough & Guelck.
Amity	Clark	250	18	53.8	+ 2.3	83	24	22	29	52	0.15	− 3.93	0.14	0.0	2	21	4	5	sw.	Prof. S. M. Samson.
Arkadelphia (near)	do	250	3	54.0	.....	79	13	28	29	38	0.50	.....	0.35	0.0	3	14	8	8	sw.	J. A. Ross.
Arkansas City	Desha	145	27	.....	.....	.....	.....	.....	.....	.....	0.53	− 3.23	0.18	0.0	4	.....	.....	.....	.....	W. C. Blundell.
Batesville	Independence	271	11	.....	.....	.....	.....	.....	.....	.....	0.58	.....	0.32	0.0	3	.....	.....	.....	.....	Miss Lelia I. Teter.
Bee Branch	Van Buren	.....	18	50.8	− 0.3	77	23†	27	28†	40	0.80	− 2.52	0.45	0.0	3	18	8	4	.....	J. E. Scanlon.
Benton	Saline	283	3	54.2	.....	82	21	28	28†	47	0.27	.....	0.27	0.0	1	23	4	3	s.	J. E. Evans.
Bentonville	Benton	1,303	5	47.8	+ 1.1	78	13	22	30	36	0.19	− 2.80	0.16	0.0	2	22	6	2	s.	U. S. Weather Bureau.
Bergman	Boone	1,324	14	45.6	- 2.5	80	13	17	29†	47	0.17	− 2.57	0.17	0.0	1	22	6	2	nw.	John T. Maxey.
Black Rock	Lawrence	.....	6	.....	.....	.....	.....	.....	.....	.....	0.41	.....	0.31	0.0	2	.....	.....	.....	.....	S. J. Howe.
Brinkley	Monroe	226	24	49.8	− 1.0	77	23	26	6	47	0.08	− 4.82	0.08	0.0	1	.....	.....	.....	.....	H. L. D. Whitson.
Calico Rock	Izard	361	6	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.10	0.0	2	.....	.....	.....	.....	W. H. Stoner.
Camden	Ouachita	158	25	55.5	+ 3.2	82	24	25	29	44	0.58	− 3.67	0.34	0.0	5	14	6	10	ne.	R. H. Quarterman.
Center Point	Howard	.....	10	55.4	+ 0.2	84	24	26	29	42	T.	− 3.86	T.	0.0	0	14	8	8	sw.	J. M. Huddleston.
Clarendon	Monroe	171	6	.....	.....	.....	.....	.....	.....	.....	0.11	.....	0.08	0.0	2	.....	.....	.....	.....	Mrs. B. E. Bishop.
Conway	Faulkner	309	27	50.0	+ 0.1	77	13†	26	21†	42	0.14	− 4.13	0.10	0.0	2	17	9	4	se.	G. H. Burr.
Corning	Clay	293	18	47.1	+ 0.4	75	24	23	3	41	0.45	− 3.78	0.20	0.5	4	11	12	7	s.	Jacob Brobst.
Dardanelle	Yell	330	24	51.0	.....	81	....	25	29	50[b]	0.78	− 2.74	0.36	0.0	4	.....	.....	.....	.....	A. Bernard.
Dennard	Van Buren	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fred B. Brown.
Dodd City	Marion	1,175	29	47.6[d]	0.0	80	....	22	....	48[d]	0.24	− 2.95	0.12	0.0	2	.....	.....	.....	n.	Neal Dodd.
Dutton	Madison	.....	9	50.8	.....	80	....	20	....	38[b]	0.08	.....	0.08	0.0	1	.....	.....	.....	n.	Edward Mize.
Earl	Crittenden	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. J. Moss.
Eldorado	Union	265	6	54.2	.....	82	24	28	29†	43	0.60	.....	0.31	0.0	5	.....	.....	.....	.....	Jeff J. Babb.
England	Lonoke	.....	4	53.4	.....	78	24†	24	29	42	T.	.....	T.	0.0	0	.....	.....	.....	.....	J. C. Chenault.
Eureka Springs	Carroll	.....	9	40.8	.....	81	13	21	28	42	0.15	.....	0.15	0.0	1	9	19	2	nw.	S. H. Britts.
Fayetteville	Washington	1,451	21	50.2	+ 1.8	78	13	22	28	37	0.09	− 3.10	0.09	0.0	1	13	12	5	sw.	University of Arkansas.
Fort Smith	Sebastian	481	28	52.0	+ 2.1	82	13	29	29	37	0.45	− 2.83	0.35	0.0	3	18	6	6	e.	U. S. Weather Bureau.
Fulton	Hempsted	264	6	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.20	0.0	3	.....	.....	.....	.....	B. C. Logan.
Hardy	Sharp	643	12	48.6	− 1.1	80	24	24	3	36	0.54	− 2.40	0.30	0.0	4	10	14	6	nw.	C. A. Caywood.
Helena	Phillips	182	25	51.6	− 0.4	78	22†	28	6	43	0.94	− 3.79	0.84	0.0	4	.....	.....	.....	.....	B. F. Modisett.
Hot Springs	Garland	600	4	51.8	.....	82	25	23	6	47	0.53	.....	0.52	0.0	2	17	0	13	n.	Hot Springs Water Co.
Huttig	Union	85	3	55.3	.....	82	.....	28	.....	42[b]	1.42	.....	0.63	0.0	4	.....	.....	.....	.....	C. A. Berry.
Jonesboro	Craighead	345	15	48.4	− 3.0	76	27	23	3	42	1.08	− 2.41	0.38	0.0	3	12	17	1	se.	Benedictine Sisters.
Junction	Union	.....	17	55.0	+ 1.7	80	24†	25	29†	34	0.42	− 3.62	0.22	0.0	2	20	5	5	se.	J. A. Lowderback.
Lake Farm	Jefferson	195	3	52.1	.....	79	9†	22	20†	48	0.24	.....	0.24	0.0	1	15	12	3	sw.	R. H. Gillespie.
Lewisville	Lafayette	262	7	55.9	.....	85	24	27	29	41	0.47	.....	0.18	0.0	3	.....	.....	.....	.....	F. W. Youmans.
Little Rock	Pulaski	357	31	52.6	+ 1.1	76	23	33	30	34	0.09	− 4.50	0.08	0.0	3	12	12	6	sw.	U. S. Weather Bureau.
Lutherville	Johnson	775	13	49.7	− 0.8	80	24	26	29	42	0.88	− 3.00	0.50	0.0	5	14	9	7	sw.	Herman Hentschel.
Malvern	Hot Spring	277	23	52.4	+ 0.5	79	24	29	6	40	0.23	− 4.56	0.13	0.0	2	.....	.....	.....	.....	Miss L. C. Smith.
Mammoth Spring	Fulton	.....	6	45.4	.....	78	24	21	3†	46	0.55	.....	0.35	0.0	4	14	14	2	.....	F. Wallick.
Marked Tree	Poinsett	.....	6	.....	.....	.....	.....	.....	.....	.....	1.45	.....	1.10	0.0	3	.....	.....	.....	.....	L. Smith.
Mena	Polk	1,100	24	54.0	+ 2.4	80	13	27	28	39	0.36	− 3.24	0.32	0.0	3	16	8	6	w.	R. R. St. John.
Mossville	Newton	.....	17	48.3	+ 0.8	73	13	20	28	40	0.66	− 3.00	0.66	0.0	2	21	2	7	n.	Theo. Ober.
Mount Nebo	Yell	1,750	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. G. Church.
Newport	Jackson	231	26	.....	.....	.....	.....	.....	.....	.....	0.45	− 4.42	0.20	0.0	4	.....	.....	.....	.....	L. R. Cobb.
Ozark	Franklin	377	19	53.4	+ 1.5	81	24	27	28	41	0.53	− 2.59	0.30	0.0	2	19	8	3	e.	R. M. Adams.
Pine Bluff	Jefferson	215	22	53.6	+ 0.8	79	24†	28	29	39	0.02	− 4.07	0.02	0.0	1	.....	.....	.....	.....	J. M. Hudson.
Pocahontas	Randolph	.....	18	48.6	+ 0.5	80	.....	25	3	46[b]	0.45	− 3.19	0.20	0.0	3	18	8	4	.....	Benedictine Sisters.
Pond	Benton	1,250	13	49.2	+ 1.0	79	13	17	28	43	0.35	− 2.46	0.22	0.0	2	4	23	3	sw.	A. F. Stevens.
Portland	Ashley	122	1	53.4	.....	80	13†	26	30	46	0.93	.....	0.38	0.0	8	.....	.....	.....	.....	L. W. Gregory.
Prescott	Nevada	327	22	53.4	+ 0.5	84	24	25	29	48	0.55	− 2.53	0.28	0.0	3	.....	.....	.....	.....	A. M. Ellsworth.
Rogers	Benton	1,385	19	50.0	+ 2.0	78	24	22	28†	43	0.18	− 2.74	0.16	0.0	2	21	4	5	n.	Carl A. Stark.
Springbank	Miller	182	3	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.45	0.0	4	.....	.....	.....	.....	G. Field.
Stuttgart	Arkansas	495	23	51.9	+ 1.1	77	23†	25	29	41	0.20	− 4.35	0.20	0.0	1	18	9	3	n.	H. A. Buerkle.
Subiaco	Logan	1,050	13	52.0	+ 0.1	78	13†	28	28	40	1.10	− 2.30	0.44	0.0	5	18	3	9	ne.	New Subiaco Abbey.
Texarkana	Miller	332	26	54.8	− 0.1	84	24	30	29†	37	0.49	− 2.71	0.18	0.0	4	.....	.....	.....	.....	D. E. Moore.
Warren	Bradley	304	15	53.6	+ 0.2	81	25	26	29	44	0.75	− 3.04	0.25	0.0	5	.....	.....	.....	.....	W. J. Savage.
Whitecliffs	Little River	206	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John E. Payton.
Wiggs	Garland	.....	17	51.4	− 0.9	79	13†	20	29†	48	0.24	− 3.67	0.17	0.0	3	15	11	4	sw.	S. D. Jester.
Wynne	Cross	.....	2	52.4	.....	80	24	19	7	42	1.21	.....	1.04	0.0	4	.....	.....	.....	.....	R. R. Poole.
Mississippi.																				
Anguilla	Sharkey	107	2	55.0	.....	78	24	28	29	43	2.05	.....	1.10	0.0	5	13	5	12	n.	E. W. Cook.
Austin	Tunica	200	14	51.0	− 1.3	77	27	26	20	42	0.57	− 5.01	0.43	0.0	3	23	2	5	nw.	H. J. Irvine.
Batesville	Panola	230	22	51.4	0.0	79	27	26	20	45	1.03	− 2.68	0.79	0.0	4	17	3	10	e.	J. M. Cox.
Big Creek	Calhoun	.....	.....	49.1[f]	.....	75	13	27	30	41[g]	1.07	.....	0.64	0.0	2	11	12	7	n.	J. P. Havens.
Byhalia	Marshall	390	1	.....	.....	.....	.....	.....	.....	.....	1.60	.....	0.70	0.0	4	18	6	6	se.	Tallahatchie Dng. Com.
Canton	Madison	228	20	54.7	− 0.9	78	13	30	7†	37	2.71	− 0.38	0.82	0.0	5	11	13	6	ne.	Dr. G. W. Smith-Vaniz.
Charleston	Tallahatchie	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.45	0.0	2	20	6	4	w.	Tallahatchie Dng. Com.
Clarksdale	Coahoma	177	3	51.8	.....	77	24†	30	29	38	0.84	.....	0.51	0.0	7	12	5	13	ne.	A. C. Tuttle.
Coffeeville	Yalobusha	241	1	.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.18	0.0	6	19	9	2	n.	Tallahatchie Dng. Com.
Corinth	Alcorn	470	22	47.2	− 3.3	74	28	28	30	39	1.74	− 2.29	1.04	0.0	5	16	3	11	nw.	M. A. Candler.
Crenshaw	Panola	187	1	.....	.....	.....	.....	.....	.....	.....	0.64	.....	0.40	0.0	5	.....	.....	.....	.....	Tallahatchie Dng. Com.
Denmark	La Fayette	.....	1	.....	.....	.....	.....	.....	.....	.....	1.01	.....	0.70	0.0	5	.....	.....	.....	.....	Do.
Duck Hill	Montgomery	.....	11	52.6	− 1.6	78	27	26	29	47	0.90	− 2.12	0.40	0.0	3	15	14	1	se.	W. H. Eskridge.
Edwards	Hinds	222	23	50.1	− 0.5	80	13†	30	7†	40	3.16	− 0.09	0.90	0.0	8	15	8	7	n.	E. F. Parr.
Enid	Tallahatchie	.....	1	.....	.....	.....	.....	.....	.....	.....	0.63	.....	0.30	0.0	3	.....	.....	.....	sw.	Tallahatchie Dng. Com.
Fayette	Jefferson	270	9	57.2	+ 1.1	82	13†	28	29	40	4.53	+ 0.16	1.87	0.0	6	16	7	7	sw.	T. L. Darden.
Greenville	Washington	126	23	54.3	0.0	79	13†	28	29	39	0.70	− 2.99	0.15	0.0	8	14	2	14	se.	F. L. Harbison.
Greenwood	Le Flore	140	10	52.6	− 1.3	79	13	27	29	45	0.74	− 2.75	0.26	0.0	7	7	9	14	sw.	J. H. Stephen.
Grenada	Grenada	194	1	.....	.....	.....	.....	.....	.....	.....	0.96	.....	0.55	0.0	3	17	9	4	sw.	Tallahatchie Dng. Com.
Hernando	De Soto	391	22	49.2	− 2.6	77	27	27	30	40	1.18	.....	0.75	0.0	4	17	4	9	ne.	Mrs. Sarah B. Jones.
Hickory Flat	Benton	435	1	.....	.....	.....	.....	.....	.....	.....	0.87	.....	0.25	0.0	5	15	12	3	n.	Tallahatchie Dng. Com.
Holly Springs	Marshall	600	23	48.3	− 1.9	75	27	27	30	32	2.25	− 1.54	1.35	0.0	6	16	2	12	ne.	L. B. Mosby.
Kosciusko	Attala	437	20	50.6	− 3.3	74	13†	28	7	37	1.47	− 1.50	0.34	0.0	12	14	9	7	ne.	E. L. Lucas.
Lake Cormorant	De Soto	206	1	.....	.....	.....	.....	.....	.....	.....	1.24	.....	0.95	0.0	3	12	11	7	sw.	Tallahatchie Dng. Com.
Lula	Coahoma	182	1	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.15	0.0	3	21	5	4	.....	Do.
Malone	Marshall	.....	1	.....	.....	.....	.....	.....	.....	.....	0.95	.....	0.30	0.0	5	.....	.....	.....	.....	Do.
Marks	Quitman	163	1	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.38	0.0	5	.....	.....	.....	.....	Do.
Natchez	Adams	206	22	57.8	− 0.7	85	14†	32	29	40	4.19	+ 0.07	1.44	0.0	6	12	4	14	n.	J. C. Weir, jr.
New Albany	Union	398	1	.....	.....	.....	.....	.....	.....	.....	1.08	.....	0.63	0.0	4	14	15	1	n.	Tallahatchie Dng. Com.
Pontotoc	Pontotoc	475	21	51.4	− 1.1	74	28	28	30	42	1.10	− 2.34	1.10	0.0	1	15	12	3	se.	Dr. C. W. Bolton.
Port Gibson	Claiborne	116	22	54.8	− 1.1	83	14	28	1†	50	3.32	− 0.24	1.41	0.0	6	13	3	14	ne.	H. H. Crisler.
Rosedale	Bolivar	143	2	51.6	.....	80	26	27	29	41	0.58	.....	0.20	0.0	5	14	6	9	sw.	T. J. Murray.
Senatobia	Tate	284	1	.....	.....	.....	.....	.....	.....	.....	0.97	.....	0.45	0.0	3	17	0	13	sw.	Tallahatchie Dng. Com.
Shoccoe	Madison	.....	7	54.6	.....	79	13	26	29	38	2.63	.....	1.20	0.0	6	19	3	8	n.	J. C. Pitchford.

TABLE 1.—*Climatological data for November, 1910. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Mississippi—Continued.																				
Suffolk	Franklin		9	57.6	.....	81	25†	29	29	36	4.19	.....	1.70	0.0	8	13	8	9	n.	Prof. Geo. H. Kent.
Swan Lake	Tallahatchie	148	9	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	0.0	1	.....	.....	.....	.....	B. F. Saunders.
Tchula	Holmes	130	5	55.0	.....	83	13	26	30	40	1.35	.....	0.40	0.0	5	9	16	5	n.	Dr. M. P. Winkler.
University	La Fayette	502	17	51.2	− 1.5	74	27	27	30	34	1.50	− 2.35	0.75	0.0	4	16	11	3	s.	Prof. J. H. Dorroh.
Utica	Hinds	287	6	56.8	.....	82	14	28	7†	42	3.04	.....	1.40	0.0	6	17	0	13	n.	Dr. J. B. Dudley.
Vicksburg	Warren	247	39	56.2	+ 0.3	77	13	35	30	29	2.97	− 1.22	0.88	0.0	8	13	8	9	s.	U. S. Weather Bureau.
Water Valley	Yalobusha	300	21	52.1	− 0.8	76	22	28	30	39	1.38	− 2.21	0.95	0.0	3	14	13	3	s.	Miss Louis Erikson.
Woodville	Wilkinson	560	17	58.5	+ 0.5	84	25	30	29	34	3.01	− 0.75	1.24	0.0	6	18	8	4	n.	James E. Lee.
Yazoo City	Yazoo	110	16	54.8	− 0.2	81	13	30	29	40*	3.08	+ 0.10	1.34	0.0	8	17	1	12	s.	W. H. Courts.
Louisiana.																				
Abbeville	Vermilion	18	22	61.4	− 0.4	84	2†	32	29	39	1.93	− 1.66	0.73	0.0	6	14	8	8	se.	Hon. C. J. Edwards.
Alexandria	Rapides	77	19	57.0	− 0.7	85	24†	28	29†	45	2.84	− 1.56	1.10	0.0	6	11	3	16	s.	Miss Nellie Graham.
Amite	Tangipahoa	130	22	57.0	− 1.7	85	14	28	30	43	2.58	− 0.99	0.95	0.0	4	7	19	4	n.	Miss Lula M. Wentz.
Baton Rouge	East Baton Rouge	60	22	62.8	+ 3.3	86	10†	42	7†	33	2.14	− 1.15	1.05	0.0	8	16	1	13	e.	Elmo M. Bott.
Burnside §	Ascension	20	10	60.4[d]	− 0.1	86	25	33	29	39[f]	2.86	+ 0.52	1.25	0.0	6	12	9	9	e.	C. S. McFarland.
Burrwood	Plaquemines	1	20	66.8	+ 0.8	84	10†	49	29	20	2.53	− 0.23	1.93	0.0	2	19	6	5	ne.	Graham Myers.
Cades §	St. Martin	.....	.....	61.8	.....	87	2	32	29	33	3.58	.....	3.08	0.0	3	21	3	6	s.	C. E. Smedes.
Calhoun	Ouachita	180	17	55.4	+ 0.2	83	24	30	20	44[a]	2.37	− 2.18	1.02	0.0	5	15	6	9	sw.	N. L. Exp. Station.
Cameron	Cameron	6	15	65.6	+ 3.8	83	1	30	30	30	0.35	− 3.79	0.35	0.0	1	11	15	4	e.	State Biologic Station.
Cheneyville	Rapides	67	20	61.2	+ 3.5	89	2	27	29	49	2.69	− 1.47	1.25	0.0	5	14	4	12	e.	Walter I. Tanner.
Clinton	East Feliciana	113	20	58.4	− 0.6	84	14	31	29	38	3.07	+ 0.07	1.18	0.0	6	11	4	15	n.	John A. White.
Collinston	Morehouse	65	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Page.
Covington	St. Tammany	39	17	57.8	− 1.8	85	10†	30	29	42	3.47	+ 0.58	1.60	0.0	8	13	3	14	n.	Mrs. Lucille Champagne.
Dodson	Winn	.....	1	58.7	.....	87	14	27	29	40	2.35	.....	0.65	0.0	5	14	9	7	n.	J. F. Lucas.
Donaldsonville	Ascension	33	20	63.2	+ 1.3	88	10†	38	29†	35	5.90	+ 2.37	3.40	0.0	5	19	2	9	e.	John F. Park.
Farmerville	Union	177	20	54.9[b]	0.0	82	23	27	28	42[b]	1.13	− 3.48	0.71	0.0	3	16	7	13	n.	W. P. Chandler.
Ferriday	Concordia	.....	3	57.3	.....	86	25	25	29	43[b]	3.48	.....	1.94	0.0	5	21	2	7	n.	R. Z. Sclater.
Franklin	St. Mary	10	18	61.0	0.0	90	23	33	29†	49	2.69	− 1.01	1.01	0.0	6	14	3	13	e.	Miss Josephine M. Bonney.
Grand Cane	De Soto	302	4	58.5	.....	88	8†	25	30	54	1.37	.....	0.73	0.0	2	23	0	7	s.	Charles M. Huson.
Grand Coteau	St. Landry	93	23	61.7	+ 2.1	86	14†	33	7†	36	2.44	− 1.30	0.52	0.0	7	18	7	5	ne.	St. Charles College.
Hammond	Tangipahoa	44	15	58.6	+ 0.2	88	25	29	29	42	2.04	− 1.43	1.05	0.0	4	21	4	5	se.	C. C. Carr.
Houma	Terrebonne	.....	19	62.2	+ 1.2	85	10	30	29	40	1.60	− 0.90	0.70	0.0	4	17	3	10	nw.	Prof. J. M. Foote.
Jena	Catahoula	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. S. Harrell.
Jennings	Calcasieu	30	12	60.4	+ 0.2	85	14	32	29†	36	3.02	− 0.23	1.21	0.0	7	12	11	7	se.	J. F. Buch.
Lafayette	Lafayette	36	21	59.5	− 0.6	86	14	32	29	36	4.68	+ 1.16	1.62	0.0	9	10	6	14	e.	J. J. Davidson.
Lake Charles	Calcasieu	22	22	59.8	+ 0.1	86	10	30	29†	42	3.25	− 1.39	1.40	0.0	4	18	0	12	s.	Geo. Boudreaux.
Lakeside	Cameron	.....	9	62.6	.....	84	10	34	29	35	1.19	.....	0.80	0.0	4	22	1	7	ne.	Miss L. J. Nunemacher.
Lawrence	Plaquemines	6	18	61.4	− 0.1	87	25	40	8†	37	1.58	− 0.97	0.78	0.0	5	20	4	6	n.	H. C. Warmoth.
Leesville	Vernon	.....	2	59.6	.....	85	10†	24	29	41	0.97	.....	0.60	0.0	8	22	4	4	s.	C. M. McFarland.
Liberty Hill	Bienville	.....	23	57.3	+ 0.3	86	24	26	29	45	2.02	− 2.64	0.85	0.0	5	12	8	10	n.	Dr. E. A. Crawford.
Logansport	De Soto	192	6	.....	.....	.....	.....	.....	.....	.....	1.42	.....	0.95	0.0	3	14	3	13	s.	Mrs. Bettie M. Dennis.
Melville	St. Landry	45	21	58.0	− 1.0	86	25	26	29†	47	3.65	+ 0.02	1.25	0.0	6	13	5	12	se.	Chas. B. McNeill.
Minden	Webster	194	18	55.1	− 0.7	85	13	27	7	50	2.16	− 1.92	1.12	0.0	7	13	5	12	s.	Miss Ethel Fort.
Monroe	Ouachita	82	22	56.0	− 0.7	85	10†	30	16†	53	2.14	− 1.96	0.70	0.0	4	17	6	7	e.	John G. Welch.
Morgan City	St. Mary	14	5	.....	.....	.....	.....	.....	.....	.....	1.40	.....	0.53	0.0	5	13	7	10	n.	Virgil E. Kinsey.
Newellton	Tensas	.....	3	55.4	.....	87	25	27	28	41[a]	3.03	.....	1.26	0.0	6	12	16	2	n.	John D. Fultz.
New Iberia	Iberia	15	20	61.6	+ 0.5	80	10†	36	29	32	3.15	+ 0.33	1.60	0.0	9	14	8	8	ne.	Mrs. John A. Gebert.
New Orleans (1)	Orleans	51	40	61.8	+ 1.2	82	10	44	29	25	3.05	− 0.74	1.50	0.0	8	14	5	11	n.	U. S. Weather Bureau.
New Orleans (2)	...do	18	21	61.4	+ 1.0	86	25	36	8†	37	5.95	+ 0.92	2.32	0.0	7	9	11	10	n.	Sugar Exp. Station.
Opelousas	St. Landry	83	18	59.4	+ 0.1	86	2	29	29†	41	2.46	− 1.15	0.97	0.0	7	9	4	17	n.	Andrew Moresi.
Paradis	St. Charles	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Louisiana Meadows Co.
Plain Dealing	Bossier	268	18	58.4	+ 2.9	91	27	25	29	49	0.89	− 2.72	0.34	0.0	5	17	8	5	ne.	Leon Sanders.
Rayne	Acadia	44	18	61.3	+ 0.6	85	14	33	7	35	3.92	− 0.07	1.22	0.0	7	17	3	10	n.	A. P. McNeil.
Reserve §	St. John Baptist	.....	8	61.2	.....	87	25	37	7†	41	3.29	.....	1.26	0.0	5	15	10	5	.....	Leon Godchaux Co. (Ltd.).
Robeline	Natchitoches	147	13	56.4	− 0.1	84	13	25	29	48	1.7[a]	− 2.29	0.75	0.0	4	16	4	10	n.	Miss Ruby McCook.
Ruston	Lincoln	312	13	60.8[f]	+ 3.4	98	25	31	29	44[f]	2.60	− 2.24	1.00	0.0	3	.....	.....	.....	n.	J. C. H. McKinney.
St. Francisville	West Feliciana	115	6	58.4	.....	85	25	32	29	37	2.35	.....	1.25	0.0	3	8	11	11	sw.	L. P. Kilbourne.
Schriever	Terrebonne	17	17	64.2	+ 3.3	89	10	33	30	53	2.49	− 0.49	1.18	0.0	4	19	3	8	e.	Chas. V. Moore.
Sheridan	Washington	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.50	.....	0.90	0.0	4	.....	.....	.....	.....	D. A. Self.
Shreveport	Caddo	249	39	57.8	+ 2.5	82	24	35	29	34	2.94	− 1.14	2.13	0.0	6	15	7	8	s.	U. S. Weather Bureau.
Simmesport	Avoyelles	.....	5	.....	.....	.....	.....	.....	.....	.....	1.66	.....	0.94	0.0	5	1	7	22	n.	C. T. Leigh.
Southern Univ. Farm	Jefferson	.....	15	.....	.....	.....	.....	.....	.....	.....	3.40	+ 0.78	2.00	0.0	5	10	15	5	se.	F. L. St. Martin.
Sugartown	Calcasieu	.....	17	56.4	− 2.5	81	14†	31	29	31[c]	2.80	− 1.30	1.55	0.0	2	8	16	6	.....	G. W. Richardson.
Talluiah	Madison	91	2	56.4[d]	.....	80	13†	24	29	47[d]	2.43	.....	0.91	0.0	6	9	15	6	.....	C. E. Speed.
Walker	Livingston	.....	.....	62.8	.....	85	24	37	6	37	2.40	.....	0.80	0.0	6	14	6	10	s.	H. C. Fondren.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
| Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 7, Lower Mississippi Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Colorado.																																
Blaine	Cimarron														T.	T.			T.									T.				T.
Buena Vista	Arkansas															.45																0.45
Calhan	Big Sandy				T.										T.	.24	.12			T.								.25				0.61
Canon City‖	Arkansas					.08										.15	.37				.04							.38				1.02
Colorado Springs	Fountain														.12	.05	T.			T.								.12				0.29
Cripple Creek	Oil Creek				.08										T.	.20												.38				0.66
Cuchara Camps	Cuchara																				.16						.33					0.49
Eads	Big Sandy																															
Fairview	St. Charles												.20					.10										.81				1.11
Florence	Arkansas																															
Fremont	Fountain			T.	.04										.06	.17	T.	T.		.11							.15					0.53
Garfield	Little Arkansas				.21										.17	.29							.06					.06				0.79
Glen Eyrie	Fountain																															
Hamps	Big Sandy				T.												.04			.01								.06				0.11
Hermit Lake	Grape Creek				.27											.50												.49				1.26
Hoehne (near)	Purgatoire															T.												.22				0.22
Holly	Arkansas																.10	.01														0.11
Lake Moraine	Fountain				.18										.06	.20	.04	.02		.04								.22				0.75
Lamar	Arkansas																.10											T.				0.10
Las Animas	....do															.11											.28					0.39
La Veta Pass	Cucharas				.18										.80	.11				.05							.16					1.30
Leadville	Arkansas			T.	.30										.05	.09	.02	.01	.02	T.			T.	.02				.04	T.	T.		0.55
Limon (near)	Big Sandy				T.											T.	T.											T.				T.
Madrid	Purgatoire															.06				.11							.06					0.23
Marshall Pass	Arkansas				.21										T.	.13	.04		.12	.09			.08					.12				0.79
North Lake	Purgatoire				.16										.05						.19											0.40
Pueblo	Arkansas				T.										.09	.20	.03			.12							.04	.05				0.53
Rocky Ford (near)	....do													T.	.17		.18											.08				0.43
St. Elmo	Chalk Creek				.12										.10	.21												T.				0.43
Salida‖	Arkansas					T.										.35												T.				0.35
Sheridan Lake	....do																.20															0.20
Stonewall	Purgatoire					.05									.07	.02					.12											0.26
Trinidad	....do																			T.							.10					0.10
Victor	Oil Creek				T.										T.	.18	.06			T.								.24				0.48
Vilas	Cimarron																															
Westcliffe	Grape Creek				.02										.20													.06				0.28
Winfield	Clear Creek				.16										.04	.06		.01		T.	.10		T.	.01	.02			.01	T.			0.41
Wortman	Arkansas			T.	.25										T.	.13	.17	T.	T.	.12	T.		.26	.13			.16	.05				1.27
New Mexico.																																
Abbott	Canadian					.54									T.																	0.54
Albert	....do				•	.26																										0.26
Arch (near)	Red					.28																										0.28
Aurora	Canadian					.28																										0.39
Bell Ranch	....do					.19									.07																	0.26
Black Lake	....do					.31																										0.31
Cabeza	....do					.06									.10																	0.16
Campana	....do														.14																	0.14
Chacon	....do				•	.81																										0.81
Cimarron (near)	....do				T.	.13									.11																	0.24
Clayton	....do																															
Clovis	Red																															
Cuervo	Canadian					.32									.03	.03																0.38
Dawson	....do														.20																	0.20
Dorsey (near)	....do					.07									.07													T.				0.14
Elizabethtown	....do														.04		.07											.06				0.17
Folsom	Cimarron					.01									.11																	0.12
Fort Union	Canadian					.21									.17																	0.38
Hayden	....do				•	.08									•	.12				T.												0.20
Johnsons Park	....do					.04									.07												T.					0.11
Kappus	....do					.10																										0.10
Lake Alice	....do															.05												.05				0.10
Logan	....do																															0.00
Los Alamos	....do					.15										.15																0.30
Lykins (near)	Red					.05																										0.05
Maxwell (near)	Canadian					.23									.06																	0.29
Melrose	Red					.19																										0.19
Miami Ranch	Canadian					.25									.09																	0.34
Montoya	....do																															
Mount Dora	....do					.08									•	.05																0.13
Nara Visa	....do					T.																										T.
Optimo (near)	....do																															
Pasamonte	....do					T.										T.																T.
Raton	....do					.05										.30				T.												0.35
Rociada	....do														•	.18																0.18
Rosebud	....do					T.									.08					T.												0.08
Roy	....do				.10										.09																	0.19
San Jon	....do					.08	T.								T.																	0.08
Solano (1)	....do					.25									.04	.18																0.47
Springer	....do					.25									.10																	0.35
Taylor	....do					.33									.08	.04																0.45
Trementina	....do					.25									.15		T.															0.40
Tucumcari (1)	....do					.22																										0.22
Valley	Cimarron															T.	T.															T.
Vermejo Park	Canadian																															
Wagon Mound (near)	....do					.25									.14																	0.39
Texas.																																
Amarillo	Canadian					.27									.01																	0.28
Archer City	Red					.14										.85		T.									T.					0.99
Arthur City ‖	....do									.20							.20															0.40
Bonham	....do																															
Canadian	Canadian																.01															0.01
Childress	Red															T.																T.
Chillicothe	....do																															
Clarendon	....do					.25																										0.25
Clarksville	....do																															0.00
Claude	....do																															0.00
Dalhart ‖	Canadian																															0.00
Denison ‖	Red	T.	T.														.72	T.									T.	.01				0.73
Finley ‖	....do																											1.30				1.30
Henrietta ‖	....do																1.12															1.12
Hereford	....do																															
Lewis Ferry ‖	....do																.06															0.00
Memphis	....do																															0.06
Miami	Canadian															.01												T.				0.01

TABLE 2.—*Daily precipitation for November, 1910. District No. 7*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Texas—Continued.																													T.			T.
Mobeetie	Red					.38														.06												0.44
Nazareth	...do																											.20				0.20
Ochiltree	Canadian																															0.00
Pampa	...do										T.			T.			.11										T.	.01				0.12
Paris ‖	Red		T.														.18															0.18
Plemons	Canadian					T.																										T.
Quanah ‖	Red																															0.00
Ringo Crossing ‖	...do					.12										T.																0.12
Romero	Canadian																															
Sherman ‖	Red																															
Sulphur Springs ‖	...do					•	.15									.25																0.40
Texline ‖	Canadian					.51								T.		T.	T.															0.51
Tulia	Red																.19											.14				0.33
Winfield	...do																															
Kansas.																																0
Alden ‖	Arkansas																	T.										T.				T.
Anthony	...do																.06															0.06
Ashland	Cimarron																				T.											T.
Burlington	Neosho																		T.													T.
Chanute	...do				T.	T.											.10			T.								T.				0.10
Cimarron	Cimarron																T.	.02														0.02
Coldwater	...do				T.																.03						.01	T.				0.04
Columbus	Neosho																.20											.02				0.22
Coolidge	Arkansas																				.05						T.					0.05
Cottonwood Falls	Neosho																			.25												0.25
Council Grove	...do																	.02														0.02
Cunningham	Arkansas																.02			T.								T.				0.02
Dodge City	...do																										T.					T.
El Dorado	...do																			T.	T.											T.
Ellinwood	...do		T.																		.10											0.10
Emporia	Neosho																	T.			.02											0.02
Eureka	Verdigris																				T.											T.
Fall River	...do																															
Fargo	Cimarron																	.01			.04						T.	T.				0.05
Fredonia	Verdigris																.15												T.			0.15
Garden City	Arkansas				T.																											
Great Bend ‖	...do																T.											T.				T.
Greensburg	...do																	.03									T.	T.				0.03
Grenola	Verdigris																	T.									T.	T.				T.
Howard	...do																.05															0.05
Hugoton	Cimarron																				.01											0.01
Hutchison	Arkansas																				T.						.01					0.01
Independence	Verdigris																	T.			.05						T.	T.				0.05
Iola	Neosho		T.													T.	.23				T.							.02				0.25
Irene	Arkansas																											T.				T.
Jetmore	...do				T.													.03														0.03
Kingman	...do																			T.								T.				T.
La Crosse	...do																.18											T.				0.18
Lakin	...do																															0.00
Larned	...do																				.10						T.	T.				0.10
Lebo	Neosho																				.12	T.										0.12
Le Roy ‖	...do																.14											T.				0.14
Liberal	Cimarron																											T.				T.
Macksville ‖	Arkansas																				.04											0.04
McPherson ‖	...do																				T.						T.					T.
Madison	Verdigris																				.12											0.12
Marion	Neosho																T.															T.
Medicine Lodge	Arkansas																															
Medora	...do																				T.											T.
Mount Hope	...do																				.07											0.07
Neosho Rapids ‖	Neosho																															
Ness City	Arkansas																				.01											0.01
Newton	...do															T.		.06														0.06
Norwich	...do																				T.						.02					0.02
Oswego	Neosho				T.												.07															0.07
Plains	Cimarron																															
Pratt	Arkansas																	.10									T.					0.10
Rome	...do																										.06					0.06
Sedan ‖	Verdigris																															0.00
Toronto ‖	...do																															
Ulysses	Cimarron																				.04						T.					0.04
Walnut	Neosho																T.	T.			T.							T.				T.
Wichita	Arkansas																T.															T.
Winfield	...do																									T.						T.
Yates Center	Verdigris																															
Oklahoma.																																1.00
Ada	Canadian															1.00																0.00
Alva	Arkansas															T.											.02					0.02
Apache	Red																															0.00
Arapaho	Washita																.50											T.				0.50
Ardmore ‖	Red																										.10					0.10
Bartlesville	Arkansas																.34										T.					0.34
Beaver	Canadian																										T.					T.
Blackburn	Arkansas																															0.00
Cache	Red																.86				T.							T.				0.86
Calvin	Canadian																		T.													T.
Chandler ‖	...do															.06																0.06
Chattanooga	Red															T.																T.
Chickasha	Washita															T.																T.
Cloud Chief	...do																															0.00
Dacoma	Cimarron															.70	T.										.02					0.72
Durant ‖	Red		T.													.09																0.09
Eldorado	...do																															
El Reno	Canadian																															0.00
Enid ‖	Cimarron																															
Erick	Red																				T.						.02					0.02
Fairland	Arkansas																T.		T.		.02							.06				0.08
Fort Gibson	...do					T.										.03																0.03
Frederick	Red																															0.00
Gage	Canadian																.05															0.05
Goodwell	...do																		T.								T.					T.
Guthrie	Cimarron																															
Guymon	Canadian																															0.00
Harrington	Red																															

TABLE 2.—*Daily precipitation for November, 1910. District No. 7*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oklahoma—Continued.																															
Hartshorne	Canadian															.85	.24		T.								.05					0.29
Healdton	Red																										.03					0.88
Helena	Cimarron																															0.00
Hennessey	....do																															0.00
Hobart	Red															.11																0.11
Holdenville ‖	Canadian																.32															0.32
Hooker	....do																.03											T.				0.03
Hurley	....do														T.		T.											T.				T.
Idabel	Red																															
Jefferson	Arkansas																															0.00
Kenton	Cimarron															.02	.06	.00	.05	T.												0.19
Kingfisher	....do															T.			T.								T.					T.
McAlester	Canadian															.60											T.					0.60
McComb	....do																															
Mangum ‖	Red															.10	T.										T.					0.10
Marlow ‖	Washita																															
Meeker	Canadian															T.																T.
Muskogee	Arkansas																				T.						T.					T.
Mutual	Canadian																															
Neola	Washita																															
Newkirk	Arkansas																										T.					T.
Norman	Canadian																															
Oakwood	....do																															
Okeene	Cimarron															T.																T.
Oklahoma	Canadian															T.			T.								T.					T.
Okmulgee	....do															T.																T.
Pauls Valley	....do																															
Pawhuska	Arkansas																										T.					T.
Perry	....do																										T.					T.
Ravia	Washita															.36			.06								.06					0.48
Sac and Fox Agency	Canadian															T.			T.													T.
Shawnee ‖	....do																.03											T.				0.03
Snyder	Red															.06																0.06
Stillwater ‖	Cimarron																										.03	T.				0.03
Supply	Canadian																															
Tulsa (1) ‖	Arkansas																				T.						T.					T.
Vinita	....do																															
Wagoner	....do				T.																						.04	T.				0.04
Waukomis	Cimarron															T.											T.					T.
Waurika	Red					T.										.02			T.								T.					0.62
Weatherford ‖	Canadian															T.																T.
Webbers Falls	Arkansas														.10					T.												0.10
Whiteagle	....do																															
Woodward	Canadian															T.																
Missouri.																																
Belle	Meramec																				.47					T.						0.47
Birchtree	Black				.60																									.18		0.78
Cape Girardeau ‖	Mississippi																															
Carutherville	....do	T.			.12	.15											T.							T.			.20	.06	T.	.02		0.55
Dean	Neosho					.05																											0.05
Doniphan	Black	T.			.41	.10																				T.	.26		.10			0.87
Farmington	Mississippi																															
Gano	Meramec				.14																.05						.03	.05		.05		0.32
Goodland	Black				.26																.05							.47		T.		0.78
Greenville	Mississippi																															
Hollister	White																															
Ironton ‖	Mississippi				T.	.50																T.		T.				T.	.43		T.	0.93
Jackson	....do	.05			.25																							.05				0.35
Joplin	Neosho																															
Koshkonong	Black				.16	.17															T.			T.			.08	.27		T.		0.68
Lamar ‖	Neosho				T.	.02														T.		.08						T.	T.	T.	T.	0.10
Marble Hill	Mississippi	.19		.10																								.15				0.44
Mountaingrove	White						.23														T.						.10			.05		0.38
Mount Vernon	Neosho																				.05					T.						0.05
Neosho	....do																				10						.03					0.13
New Madrid ‖	Mississippi					.24																						.04	.35		.04	0.67
Oakfield	Meramec				.01																.08						T.	.27				0.36
Olden	White																										.10	.05				0.15
Perryville	Mississippi					.20																										0.20
Rolla	Meramec				.18																.07						T.	T.		.07		0.32
Sikeston	Mississippi																															
Springfield	White																	T.			.11						.02	T.		.01		0.14
Steelville	Meramec				.29																									T.		0.29
Kentucky.																																
Blandville	Mississippi	.11			.11	.06																		T.			T.	1.15				1.43
Lynnville	....do																															
Tennessee.																																
Arlington ‖	Mississippi																															
Bolivar ‖	....do					.60																		T.			.30	.62	.10			1.62
Brownsville ‖	....do		T.			.60																					T.	.89		T.		1.49
Covington ‖	....do					.46																						.45	T.			0.91
Dyersburg ‖	....do		.20			.20																								T.		0.40
Jackson	....do					.49																					.91		.09			1.49
Kenton	....do	T.			.04	.12																		.05			.06	.07	T.	.02		0.36
Memphis	....do	T.	T.		.08	.72											.03									T.	.21					1.04
Milan ‖	....do		.04			.20																	.02	.05			.06	.15		.05		0.57
Trenton	....do																							.65			.25		T.			0.90
Union City	....do				.15	.09																					.30					0.54
Arkansas.																																
Alicia	White																										.55					0.55
Amity	Ouachita					T.											.14									T.	.01					0.15
Arkadelphia (near)	....do									T.	.05						.10										.35					0.50
Arkansas City ‖	Mississippi						.01										.18	.16	T.									.18				0.53
Batesville (2) ‖	White						.22										T.	T.									.32	.04				0.58
Bee Branch	Arkansas				T.	.45											.20									T.	.15					0.80
Benton	Ouachita																.27															0.27
Bentonville	Arkansas				.16											T.					T.						.03	T.				0.19
Bergman	White																										.17					0.17
Black Rock ‖	....do				T.	.10																						.31				0.41
Brinkley ‖	....do					.08											T.										T.	T.				0.08
Calico Rock ‖	....do				.08	.10																										0.18
Camden ‖	Ouachita					.02	.02				.34						.12	.08														0.58
Centerpoint	Red	T.														T.										T.						T.
Clarendon	White		T.			.03											.08											T.	T.			0.11

TABLE 2.—*Daily precipitation for November, 1910. District No. 7*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Arkansas—Continued.																															
Conway	Arkansas	T.			T.											T.	.10									.04	T.				0.14
Corning	White	T.			.20																						T.	.18		.05	.02	0.45
Dardanelle ‖	Arkansas					.08					.36						.20											.14				0.78
Dennard	White																														
Dodd City	...do					.12																					.12					0.24
Dutton	...do					T.											.08										T.					0.08
Earl	St. Francis																														
Eldorado ‖	Ouachita					.07	T.				.01						.31	.20							T.			.01				0.60
England ‖	Arkansas																T.											T.	T.			T.
Eureka Springs	White					.15											T.										T.					0.15
Fayetteville	...do																									.09						0.09
Fort Smith	Arkansas				T.											.35					T.						.09	.01				0.45
Fulton ‖	Red										.12						.08												.20			0.40
Hardy	White				.02	.28																					.08	.16				0.54
Helena (2) ‖	Mississippi		T.			.06	.04																	T.				.36	.48			0.94
Hot Springs	Ouachita	.01																										.52				0.53
Huttig	...do					.12											.49	.18										.63				1.42
Jonesboro	White				.38																						.35	.35				1.08
Junction	Ouachita					.22					T.	T.							T.									.20				0.42
Lake Farm	Arkansas																										.24					0.24
Lewisville	Red	T.														.13		.16									T.	.18				0.47
Little Rock	Arkansas	.01			T.	T.										.04	.04								T.		T.	T.				0.09
Lutherville	...do					.12										T.	.24							.02			.40	.10				0.88
Malvern ‖	Ouachita																.10											.13				0.23
Mammoth Spring	White				.10	.25																						.19		.01		0.55
Marked Tree ‖	St. Francis					.23	.12																						1.10			1.45
Mena	Ouachita															.11	.21										.04					0.36
Mossville	White																										.31	.35				0.66
Mount Nebo	Arkansas																														
Newport (1) ‖	White					.15											.20											.06	.04			0.45
Ozark	Arkansas															T.	.30										.23					0.53
Pine Bluff ‖	...do					.02																										0.02
Pocahontas	White				.15	.10																						.20				0.45
Pond	Arkansas				T.	.22																					.13	T.				0.35
Portland ‖	Ouachita		.04			.38					.03						.16	.15									.04	.05	.08			0.93
Prescott ‖	...do				T.						.28						.07	T.											.20			0.55
Rogers	Arkansas				T.	.16										T.					T.					.02	T.				0.18
Springbank	Red					T.	T.				.04						.45	.16											.14			0.79
Stuttgart	Arkansas	T.																									T.	.20				0.20
Subiaco	...do	T.			T.	.44					.19					.19	.06							T.			22					1.10
Texarkana ‖	Red																.13	.06										.12	.18			0.49
Warren ‖	Ouachita		.07			T.					.25						.15	.08										.20				0.75
Whitecliffs ‖	Red																															
Wiggs	Ouachita	T.			T.	T.					.02						.17								T.		T.	.05				0.24
Wynne ‖	St. Francis					1.04											.07											.06	.04			1.21
Mississippi.																																
Anguilla	Yazoo		T.		1.10	T.											.42	.03					22				.28					2.05
Austin	...do		T.								.07						T.					T.	.07		T.		.43					0.57
Batesville ‖	...do					.15					.09																.45	.34				1.03
Big Creek	...do					.43															T.					T.	.64					1.07
Byhalia	...do					.30												T.								.20	.70	.40				1.60
Canton	Big Black		.37			.78											.50		.24							.82						2.71
Charleston	Yazoo					.25					T.						T.								T.	T.	.45					0.70
Clarksdale ‖	...do					.09	.05				.12						.01	T.								.06	.46	.05				0.84
Coffeeville	...do		T.			.18					.15				T.		.08	T.						.06	.04		.17					0.68
Corinth ‖	Mississippi					.60											T.								.04		.06	.98		.06		1.74
Crenshaw	Yazoo		.01		T.	.12					.05						T.										.40	.06				0.64
Denmark	...do					.23																		.03		.02	.70	.03				1.01
Duck Hill	...do					.20					.30						T.	T.	T.								.40					0.90
Edwards	Big Black		.68				.30				.03				T.		.40	.10	.25	.50				T.	T.	T.	.90					3.16
Enid	Yazoo					T.					.27						.06	T.						T.	T.		T.	.30				0.63
Fayette	Mississippi		.32			1.34											.16	1.87		.54							T.	.30				4.53
Greenville ‖	Yazoo		T.			.12	.03				.15						.12	.14	.05	T.							.07	.02				0.70
Greenwood ‖	...do					.14	.06				.07				T.		.10	.05	.06						T.		.26					0.74
Grenada	...do					T.					.55			T.				T.			T.					.10	.31					0.96
Hernando ‖	...do					.15											.05										.75	.23				1.18
Hickory Flat	...do					.10																		.09	.03		T.	.40	.25				0.87
Holly Springs ‖	...do					.50	.01																	.01		.02	.36	1.35				2.25
Kosciusko ‖	Big Black					.34	.15					.02				T.	.31	.07	.05	.05					.21	.02	.02	.05	.18				1.47
Lake Cormorant	Yazoo	T.			T.	.26											.03							T.	T.		T.	.95				1.24
Lula	...do					.15													T.									.02	.13				0.30
Malone	...do					.17					.08					T.	T.							.10	T.			.30	.30				0.95
Marks	...do				T.	.12					.11													.03				.38	.26				0.90
Natchez ‖	Mississippi		.13	T.			1.00											.49	1.44	.96						T.			.17			4.19
New Albany	Yazoo					.20																		.05	T.			.63	.20				1.08
Pontotoc	...do				T.	T.											T.	T.										1.10				1.10
Port Gibson ‖	Mississippi		.33				.37										T.	.23	.64	.34						T.		T.	1.41				3.32
Rosedale ‖	Yazoo					.08					.20						.05	.05										.20					0.58
Senatobia	...do		T.			.09																			T.	T.	T.	.45	.43				0.97
Shoccoe	Big Black		.12			1.20											.46	T.	.24	.11					T.		T.	.50					2.63
Suffolk	Mississippi		.02			1.70											.20	1.51	.32	.31					.07			.06					4.19
Swan Lake ‖	Yazoo							T.					T.				T.							T.	T.	T.	T.		.20				0.20
Tchula	...do	T.	.10			.40					T.						.30							.15				.40					1.35
University	...do		T.			.32					.15						T.	T.							T.		T.	.75	.28				1.50
Utica	Mississippi		.18			.47											.37	.45		.17							T.	1.40					3.04
Vicksburg	...do		.61			.11					.02						.55	.36	.32	.12					T.	T.	T.	.88					2.97
Water Valley	Yazoo				T.	.18					.25						T.							T.			T.	.95					1.38
Woodville	Mississippi					.65											.19	1.24	.08	.27								.58					3.01
Yazoo City ‖	Yazoo					1.34	.40										.22	.20	.06	.10								.28	.48				3.08
Louisiana.																																
Abbeville	Coast					.70									T.	.03	.08	.73	.31									.08					1.93
Alexandria ‖	Red						.30										.60	.20	.90	.20									.64				2.84
Amite ‖	Coast			.90			.48					T.			T.		T.	.95	T.	T.	T.								.25				2.58
Baton Rouge ‖	...do					.02	1.05								.10	.20		.15	.30	.29									.03				2.14
Burnside	...do					1.23									.03		.04	.03	.50							T.		1.03					2.86
Burrwood	...do					.60													1.93														2.53
Cades	...do					3.08										T.	T.		.32									T.	.18				3.58
Calhoun	Ouachita					.35											.75	.10	.15									1.02					2.37
Cameron	Coast								T.							T.	T.		.35														0.35
Cheneyville ‖	Red						.15										.10	.15	1.04	1.25													2.69
Clinton ‖	Coast			T.		T.	.31									T.	.05	.48	.84	.21									1.18				3.07
Collinston ‖	Ouachita																																
Covington ‖	Coast			.05		.01	.60										.26	.11	.54	.30									1.60				3.47

TABLE 2.—*Daily precipitation for November, 1910, District No. 7*—Continued.

Stations	River basins	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Dodson	Red					.25											.65	.63	.53									.29				2.35
Donaldsonville [1]	Coast		T.		T.		3.40									.45			.10	.85							T.		1.10			5.90
Farmerville [1]	Ouachita									T.						.71			.12									.30				1.13
Ferriday	do					.99												1.94	.13	.31								.11				3.48
Franklin [1]	Coast			T.			1.01									.22	T.	.46	.41	.56							T.		.03			2.69
Grand Cane [1]	Red																.64	.73														1.37
Grand Coteau	Coast		.02			.52										1.00	.15	.45	.27					T.		T.		.03				2.44
Hammond	do															.35	T.	.14	.50									T.	1.05			2.04
Houma [1]	do					.70											.10		.50	.30												1.60
Jena	Red																															
Jennings [1]	Coast			.02			1.21										.45	.15	.78	.05								.36				3.02
Lafayette [1]	do			.12		.20	1.35								.02		.44	.35	.38	.20								1.62				4.68
Lake Charles [1]	do			1.00		.30										1.40			.55													3.25
Lakeside	do															.03	.15	.80	.21													1.19
Lawrence [1]	do			.04			.78													.51	.04							.21				1.58
Leesville	Sabine		.12			.10										.01	.02	.60	.01	.07								.04				0.97
Liberty Hill	Red					.20									.85	.15	.32											.50				2.02
Logansport [1]	Sabine						.43										.95		.04													1.42
Melville [1]	Red			T.		1.25	.15									T.	T.	.12	.88	.33								.92				3.65
Minden [1]	do					.05	.03				T.						.58	.32	.04	T.								1.12				2.16
Monroe [1]	Ouachita					T.	.27				T.							.60	.57									.70				2.14
Morgan City [1]	Coast						.53									.04			.42	.36								.03	.02			1.40
Newellton	Mississippi	.58				.32										.25	.34	.28									1.26					3.03
New Iberia	Coast			.15		1.60	.05								.25	.05	T.	.20	.60	.17								.08				3.15
New Orleans (1)	do					.92	.04								T.	.01	.23	.03	.31	.01								1.50				3.05
New Orleans (2)	do					.80	.22								.01			.24		.35						.01			2.32			3.95
New Orleans (3)	do					.56											.09	.03	.31									1.28				2.27
New Orleans (4)	do					.95									.01		.22	.01	.30	.04						.01		2.32				3.86
New Orleans (5)	do					1.27	.03								.01	.01	.28	.02	.39	.08							.01	2.42				4.52
New Orleans (6)	do					.96	.04										.25	.03	.33									1.60				3.21
New Orleans (7)	do					.69	.02										.14	.03	.32	.01								1.18				2.39
New Orleans (8)	do					1.10	.03										.16	.06	.33	.02								1.50				3.20
Opelousas [1]	do			T.		.72	.32									.19	.09	T.	.97	.12									.05			2.46
Peradis	do																															
Plain Dealing	Red											.12					.11	.34	.13									.19				0.89
Rayne [1]	Coast			.30		.60	.62										.10	.30	.60	.20									1.20			3.92
Reserve [1]	do						1.03												.23	.36	.41										1.26	3.29
Robeline [1]	Red																.27	.75	.55	.17												1.74
Ruston	Ouachita					.50												.50										1.00				2.00
St. Francisville [1]	Mississippi					.50	.60														1.25											2.35
Schriever	Coast					.80								T.				T.	1.18	.10									.41			2.49
Sheridan	Pearl					.90										.90			.40	.30												2.50
Shreveport	Red					.05										.05	.57	.10	.04							T.	2.13					2.94
Simmesport [1]	do						.16											.30	.94	.15								.11				1.66
Southern Univ. Farm	Coast					.85									T.			.05	.40	.10									2.00			3.40
Sugartown	do					1.25												1.55														2.80
Tallulah	Mississippi	.12				.36					.19						.61	.30										.85				2.43
Walker [1]	Coast		.10			.50										.10		.70	.20									.80				2.40

MONTHLY WEATHER REVIEW.

NOVEMBER, 1910.

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 7, lower Mississippi Valley.*

Date.	Colorado.						New Mexico.				Texas.				Oklahoma.				Kansas.								Missouri.											
	Lamar.		Leadville.		Pueblo.		Albert.		Clinton.		Amarillo.		Paris. §		Bartlesville.		Ardmore. §		Wichita.		Liberal.		Iola.		Ellinwood.		Dodge City.		Coldwater.		Ironton. §		Caruthersville.		Lynnville, Ky.		Jackson, Tenn.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	64	32	47	24	56	33	68	41	62	32	68	37	70	45	66	40	70	32	54	40	64	39	56	36	56	30	54	32	64	46	70	44	70	44			70	40
2	64	32	49	24	54	33	68	33	64	34	74	38	68	46	66	41	68	33	53	40	65	39	58	39	58	30	58	32	66	46	72	46	65	45			65	40
3	66	33	51	25	58	34	68	41	64	35	74	41	70	46	68	41	70	34	55	40	65	41	60	39	60	32	60	34	68	46	74	46	68	46			68	41
4	66	33	51	25	58	34	68	42	64	35	74	42	70	46	68	41	70	34	55	40	65	41	60	39	60	32	60	34	68	46	74	46	68	46			68	41
5	66	33	51	25	58	34	68	42	64	35	74	42	70	46	68	41	70	34	55	40	65	41	60	39	60	32	60	34	68	46	74	46	68	46			68	41
6	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
7	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
8	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
9	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
10	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
11	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
12	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
13	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
14	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
15	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
16	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
17	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
18	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
19	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
20	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
21	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
22	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
23	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
24	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
25	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
26	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
27	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
28	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
29	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
30	72	35	55	28	62	36	72	42	68	36	76	42	72	46	70	42	72	36	58	42	68	42	62	40	62	34	62	36	70	48	76	48	70	48			70	42
Mns.	64.7	27.3	40.9	20.6	60.4	29.5	67.9	36.3	60.9	26.1	69.7	35.0	69.7	41.8	64.7	31.8	67.8	34.2	58.6	34.2	62.5	29.6	57.9	32.1	61.2	29.6	59.7	31.8	64.2	31.8	66.2	27.9	61.2	34.5	60.4	32.2

Date.	Oklahoma—Continued.												Missouri.													
	Enid. §		McAlester.		Mangum. §		Muskogee.		Oklahoma.		Weatherford. §		Woodward.		Caruthersville.		Ironton. §		Lamar. §		Oldon.		Springfield.		Jackson, Tenn.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	66	36	72	39	66	43	73	54	66	41	64	43	62	37	70	49	64	45	67	46	67	49	65	37	70	44
2	65	33	61	40	61	33	62	34	62	32	64	35	63	36	62	33	58	34	58	34	60	32	57	33	65	40
3	67	34	68	36	62	36	64	34	74	36	64	36	61	38	64	34	61	34	61	34	62	34	58	36	68	41
4	71	36	68	32	62	36	68	35	76	36	64	36	56	34	64	36	66	36	62	32	62	34	58	36	68	41
5	68	37	64	37	63	38	68	38	74	36	64	36	73	36	64	36	71	37	68	37	65	37	58	36	68	41
6	69	37	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
7	72	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
8	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
9	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
10	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
11	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
12	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
13	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
14	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
15	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
16	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
17	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
18	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
19	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
20	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
21	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
22	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
23	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
24	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
25	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
26	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
27	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
28	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
29	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
30	73	36	72	42	73	38	76	38	77	37	68	36	72	35	68	36	76	37	72	37	68	37	58	36	68	41
Mns.	67.3	31.2	69.3	41.4	64.3	34.3	67.8	37.3	64.3	37.8	66.6	34.6	65.4	31.2	61.2	34.5	56.2	27.9	60.6	31.6	58.9	33.4	55.0	35.0	60.4	32.2

§ Average for month incomplete.

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 7*—Continued.

Date.	Tennessee.				Arkansas.																Mississippi.					
	Memphis.		Union City.		Bentonville.		Corning.		Dardanelle.§§		Eldorado.§§		Fort Smith.		Little Rock.		Pine Bluff.§§		Texarkana.§§		Wynne.§§		Clarksdale.§§		Corinth.§§		Greenville.§§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	67	52	63	49	70	38	66	47	73	44	76	41	73	50	68	53	74	36	70	43	68	43	71	39	67	39	75	31
2....	60	40	64	37	55	34	65	38	62	43	65	51	60	43	58	41	61	48	64	51	68	42	61	50	54	46	65	49
3....	50	34	50	23	60	30	52	23	57	28	61	35	58	37	53	37	61	36	59	33	62	31	56	33	49	29	59	37
4....	52	37	44	26	58	45	47	29	56	41	68	35	57	47	53	43	58	42	69	39	64	36	59	34	54	26	65	36
5....	48	39	45	38	49	28	53	39	59	45	52	46	54	39	55	44	55	43	60	48	53	40	49	40	42	28	50	44
6....	52	33	55	32	57	26	56	25	63	26	61	31	61	30	60	36	60	31	60	34	60	31	56	31	52	29	58	36
7....	64	40	68	40	68	38	69	35	73	27	70	32	71	34	65	36	69	36	69	38	68	29	68	34	66	30	70	32
8....	69	47	72	35	72	45	74	33	77	27	76	36	74	40	70	44	74	38	74	38	74	32	73	36	71	32	74	39
9....	72	49	72	40	71	50	74	46	79	34	78	40	75	51	71	47	70	43	76	45	73	49	75	41	70	40	76	40
10....	61	45	68	45	55	33	69	45	68	44	74	48	61	44	64	52	69	49	69	54	65	49	68	46	61	44	71	46
11....	58	39	56	29	65	29	59	29	70	31	70	37	67	36	66	43	65	35	78	41	62	30	64	35	58	33	67	39
12....	55	36	53	28	70	38	56	30	62	31	78	36	65	42	62	40	68	35	73	42	60	31	64	35	57	30	71	36
13....	69	44	57	29	78	48	67	32	81	37	81	38	82	47	75	41	70	48	81	44	72	41	74	39	60	32	79	40
14....	63	41	57	42	51	33	60	47	65	53	76	61	62	45	65	45	66	60	59	59	72	53	69	51	66	40	73	59
15....	47	35	50	34	43	29	48	28	52	33	53	44	49	38	51	36	56	38	50	45	50	39	54	36	50	31	57	41
16....	46	38	48	36	50	33	49	35	50	32	45	40	49	40	48	38	50	38	49	42	58	39	48	37	47	32	46	40
17....	52	40	54	36	52	29	55	26	60	35	51	40	57	36	56	42	56	40	52	41	65	42	55	40	52	36	52	40
18....	55	37	46	26	56	31	56	25	60	29	56	41	59	34	57	37	58	35	56	39	63	31	57	35	56	30	59	41
19....	57	35	55	.....	59	27	58	25	60	28	63	35	60	34	58	38	63	35	61	39	60	32	62	37	60	30	63	42
20....	61	38	61	24	55	32	61	24	60	27	68	31	61	39	62	37	67	30	67	35	66	32	66	31	64	28	68	33
21....	61	42	60	.....	62	30	61	26	65	26	70	39	65	31	63	37	67	31	69	40	63	30	66	33	64	29	69	42
22....	70	45	67	39	71	43	69	30	76	26	76	39	74	39	73	43	75	36	75	42	76	34	75	37	72	34	74	39
23....	71	57	72	50	66	44	71	49	76	29	76	41	74	53	76	59	77	58	76	42	76	43	73	38	68	37	77	59
24....	71	56	71	34	77	48	75	35	76	43	82	51	77	50	75	56	79	62	84	69	80	54	77	57	68	49	79	59
25....	67	50	68	.....	76	40	70	34	.....	43	71	52	72	49	69	53	76	50	67	54	74	55	72	54	66	48	74	53
26....	70	55	70	.....	70	52	67	38	76	46	77	51	73	56	71	60	76	65	76	56	76	44	76	53	72	40	76	57
27....	74	45	73	60	65	29	73	55	76	60	78	63	67	39	76	43	79	65	75	63	79	63	77	61	74	54	74	63
28....	46	34	60	.....	44	22	56	29	70	31	55	35	52	29	49	33	54	34	53	33	59	30	51	37	48	40	54	38
29....	46	34	48	.....	55	28	44	25	60	25	67	28	59	29	58	34	60	28	55	30	53	33	56	30	50	31	58	28
30....	40	29	.....	.....	37	22	38	25	.....	34	52	28	44	32	45	33	49	30	52	30	55	32	48	31	39	28	51	32
Mns..	59.1	41.5	59.6a	36.2a	60.6	35.1	60.0	33.6	66.8b	35.3	67.5	40.8	63.7	40.4	62.4	41.7	65.4	41.8	65.9	43.6	65.8	39.0	64.0	39.7	59.2	35.2	66.1	42.5

Date.	Mississippi.						Louisiana.																			
	Koschusko.§§		Natchez.§§		Vicksburg.		Alexandria.§§		Baton Rouge.§§		Covington.§§		Lafayette.§§		Lake Charles.§§		Monroe.§§		New Orleans.		Robeline.§§		Schriever.§§		Shreveport.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	71	36	82	43	73	47	80	35	80	47	77	35	78	46	81	45	83	36	74	51	79	31	82	37	78	51
2.....	64	45	71	50	61	49	75	46	83	54	81	45	82	50	84	51	66	47	76	59	78	50	84	38	64	50
3.....	56	36	64	43	60	41	60	46	69	58	72	49	66	54	65	53	73	38	65	54	67	48	70	40	63	41
4.....	62	31	76	42	64	40	72	40	82	49	70	37	75	45	71	43	77	37	72	47	75	42	80	60	74	46
5.....	53	39	66	44	62	41	68	42	66	60	71	40	68	48	73	46	70	44	73	54	68	46	75	58	67	47
6.....	53	34	56	38	57	38	58	39	58	45	63	43	58	42	64	41	66	36	58	47	61	32	80	50	60	39
7.....	64	28	72	34	64	38	70	30	65	42	69	32	67	33	73	32	74	34	62	46	72	28	83	49	69	40
8.....	69	34	71	35	68	44	70	30	72	44	70	33	70	37	76	34	78	36	66	48	75	28	86	40	73	42
9.....	72	35	80	41	75	47	80	35	78	50	77	36	77	41	78	42	82	38	74	55	81	35	81	48	79	50
10.....	68	35	75	51	72	55	80	49	86	55	85	43	83	55	86	50	85	38	82	60	79	42	89	48	74	56
11.....	59	35	70	43	66	45	73	43	80	57	76	46	74	55	79	52	78	41	72	58	78	39	79	51	70	44
12.....	67	33	81	43	74	45	80	39	83	53	77	40	76	49	81	50	82	39	71	55	81	38	80	43	78	45
13.....	74	37	84	46	77	53	82	39	85	58	80	41	81	51	84	51	85	32	80	55	84	38	83	43	82	61
14.....	70	50	85	61	77	59	84	55	86	61	80	44	86	60	87	57	84	39	80	65	82	59	85	52	76	58
15.....	56	40	59	53	59	49	62	53	72	60	62	57	66	62	74	56	59	53	71	59	66	52	82	51	58	44
16.....	45	37	49	49	54	42	48	44	56	56	64	53	57	53	62	46	49	30	64	53	47	44	82	46	46	42
17.....	48	38	47	39	49	44	58	44	58	54	68	49	54	48	50	44	53	40	66	52	49	43	85	49	50	42
18.....	50	43	51	44	50	46	56	44	59	55	55	49	54	49	55	45	56	41	57	54	50	43	80	49	55	45
19.....	56	43	60	44	62	44	60	40	60	48	60	46	53	46	68	42	70	39	57	48	50	36	70	42	62	40
20.....	64	31	70	36	65	42	70	32	59	45	61	38	59	37	75	40	74	33	54	46	72	35	69	61	68	39
21.....	66	37	73	37	68	45	75	35	65	46	70	39	74	40	77	40	79	36	65	48	75	30	70	63	72	42
22.....	72	37	83	43	73	53	79	38	78	52	76	40	79	45	79	41	81	40	74	55	79	37	86	62	76	46
23.....	74	37	80	53	75	59	80	48	81	55	78	41	79	51	80	45	82	43	76	58	81	43	79	48	79	61
24.....	62	56	83	60	76	61	85	55	84	59	79	47	84	59	82	50	85	41	81	60	80	62	79	49	82	64
25.....	67	59	85	62	73	64	85	62	85	63	85	60	84	63	85	52	71	56	78	65	82	61	86	45	78	59
26.....	74	51	76	65	75	62	80	62	81	67	79	59	79	62	80	58	70	52	80	64	77	60	86	45	76	64
27.....	72	59	81	65	75	48	85	64	78	66	78	65	82	62	80	59	65	50	79	64	78	67	84	44	77	43
28.....	51	44	57	41	53	41	58	38	61	49	62	49	58	41	62	40	63	40	67	51	57	35	79	43	54	36
29.....	55	28	64	32	57	36	65	28	66	42	64	30	64	32	70	30	68	30	58	44	65	25	75	48	61	35
30.....	46	30	52	32	48	35	54	28	52	46	58	31	55	33	61	30	60	31	54	47	55	27	86	33	53	37
Means.....	62.0	39.3	70.1	45.6	65.4	47.1	71.1	42.8	72.3	53.2	71.6	43.9	70.7	48.3	74.1	45.5	72.3	39.7	69.5	54.1	70.8	41.9	80.5	47.8	68.5	47.0

Climatological Data for November, 1910.

DISTRICT No. 8, TEXAS AND THE RIO GRANDE VALLEY.

BERNARD BUNNEMEYER, District Editor.

GENERAL SUMMARY.

While the weather during the month was unusually mild and pleasant, with abundant sunshine, there was a general deficiency of precipitation, except over the upper reaches of the Rio Grande and Rio Pecos watersheds. Texas received only about 31 per cent of the normal amount of moisture, while New Mexico received about 72 per cent, but it is well to remember that the November precipitation in that Territory, normally, is much less than it is in Texas. Water for domestic use and for stock has become scarce in many localities of the district. Precipitation occurred mostly from the 4th to 6th, 15th to 18th, and 26th to 28th, the average number of days with appreciable precipitation being 3 in New Mexico and Colorado, and only 2 in Texas. Amounts of 1 inch or more occurred in the upper portions of the Rio Grande, Rio Pecos, and Brazos watersheds, and of 1 to over 2 inches over a belt of perhaps 120 miles in width, extending through Texas in a northeasterly direction from the Nueces watershed to that of the Sabine.

The greatest monthly precipitation in Colorado was 1.90 inch at Cumbres; in New Mexico, 1.66 inch at Tajique; and in Texas, 3.41 inches at Nacogdoches. There was practically no precipitation at Manassa, Colo., and at 16 stations in Texas, while at 11 other stations in Texas and at 4 in New Mexico the monthly amounts were 0.10 inch or less.

There was no snow in Texas, except some flurries at Plainview, but in the northwestern portion of the district much of the precipitation was in the form of snow. The greatest monthly fall in Colorado was 23.5 inches at Cumbres, and in New Mexico, 16.5 inches at Harveys Upper Ranch. These amounts are less than those reported for October. At the close of the month the higher peaks were snowcapped, and a small amount of snow remained on the northern slopes of the mountains, but the southern slopes and the valleys and plateaus were generally bare.

TEMPERATURE.

The monthly mean temperature was 5.3° above normal in Colorado, and 2.6° above in New Mexico and in Texas. There were no marked changes of temperature, such as are incident to this season, although there were several moderately cold spells of short duration. The extremes of temperature were much greater during October than during the present month. The diurnal range of temperature varied from about 9° on the upper Texas coast to about 38° in the extreme northwestern portion of the district.

The highest and lowest temperatures reported were: In Colorado, 67° at San Luis on the 8th and 11th, and 6° at the same place on the 20th; in New Mexico, 88° at Carlsbad on the 4th, and 4° at Red River Canyon on the 17th; and in Texas, 96° at Tilden on the 25th, and 19° at Plainview on the 28th. The local monthly means ranged from 35.4° to 39.1° in Colorado; from 34.5° to 56.3° in New Mexico; and from 50.0° to 70.2° in Texas.

PRECIPITATION.

There was a marked deficiency of precipitation over the lower stretches of the Rio Grande and Rio Pecos watersheds. The former averaged only 0.08 inch over the entire distance from El Paso to its mouth, and the latter only 0.01 inch over the long stretch south of New Mexico. Over the upper portions of these watersheds the precipitation was much greater, the average being 0.68 inch for the Rio Grande and 0.49 inch for the Rio Pecos. In a number of localities the monthly amounts approximated or exceeded the normal, but the greatest was only 1.90 inch. For the entire Rio Grande drainage basin the precipitation averaged 0.53 inch, and for that of the Rio Pecos 0.44 inch. This is a large decrease from the amounts reported for the preceding month.

The deficiency of precipitation over the Texas watersheds was general, the shortages ranging from 0.44 inch over the Nueces drainage basin to 2.78 inches over that of the Sabine. There was not a single locality in Texas where the monthly precipitation exceeded the normal. The following are the average monthly amounts in inches for the various watersheds: Nueces, 0.87; San Antonio, 1.20; Guadalupe, 0.95; Lavaca, 0.30; Colorado, 0.59; Brazos, 0.84; Trinity, 0.88; Neches, 1.98; Sabine, 0.99; and coastal plains, 0.50. These amounts are decidedly less than those reported for October, except in case of the Neches watershed, which had a slight increase.

RIVER CONDITIONS.

In consequence of the scanty precipitation the rivers of the district were unusually low. The rain which fell was readily absorbed by the dry soil, and there were therefore no rises of consequence during the month. The stages of the Guadalupe and Sabine, and of long stretches of the Colorado, Brazos, and Trinity rivers are the lowest on record for November. While the flow of the Rio Grande diminished steadily during the month, there was an abundance of water in the lower portion of the stream for irrigation purposes.

MISCELLANEOUS.

Harveys Upper Ranch.—The depth of snow in the valleys and gulches varied from 10 to 24 inches and over the southern exposures about 6 inches. Some damage was caused by high winds blowing down trees and haystacks.

Rosedale.—The month was warmer than usual and the precipitation heavier. The depth of snow on the north side of the mountains averaged about 6 inches.

Grand Saline.—Rain is greatly needed for stock water and plant life.

Haskell.—A good general rain is needed. Grass is very short and feedstuff is scarce.

Richmond.—On account of the prolonged drought many of the lakes and streams in Fort Bend County are dry for the first time since the great drought of 1860, and the water supply of a large number of cisterns has been exhausted.

Sealy.—The weather has been too dry to prepare land for next season's crop. Water for stock is getting scarce.

Victoria.—Much alarm is felt over the prolonged drought in Victoria County. It is probably the worst since 1893, when crops and cattle suffered severely. Stockmen are shipping or moving their cattle to prevent losses.

Banking trees.—Mr. N. E. Stout, of Friendswood, Tex., who owns a large fig and orange orchard at that place, has been banking his trees every winter since 1902, but during this period the temperature has not been low enough to kill any trees, although new growths were killed in 1905 and slightly frostbitten during the winter of 1908–9. While he has not been able to determine whether banking has been of benefit, he has never neglected to resort to this method of protection from the cold. During the coming winter, however, he expects to do some experimental work with orchard heaters, and the results of his experience are looked forward to with interest by horticulturists. Mr. Stout will probably be aided in his work by the forecasts and warnings of severe weather conditions which he receives from the Weather Bureau.

TABLE 1.—*Climatological data for November, 1910. District No. 8, Texas and Rio Grande Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																			
Blanca	Costilla	8,403	1	35.4	.....	66	11	10	8†	48	0.25	.....	0.13	3.4	3	18	11	1	sw.	L. C. Audrain.
Cumbres	Conejos	10,015	3	.....	.....	.....	.....	.....	.....	.....	1.90	.....	0.79	23.5	6	.....	.....	.....	.....	Ida M. Lively.
Garnett	Costilla	7,576	17	35.6	+ 5.7	63	3	9	28	48	0.35	+ 0.03	0.20	3.5	2	18	7	5	.....	Chas. Speiser.
Hermit	Hinsdale	9,843	.....	.....	.....	.....	.....	7	27	.....	0.41	.....	0.25	7.0	2	15	11	4	.....	Marion Mason.
La Veta Pass	Costilla	9,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Norvin R. Lively.
Manassa	Conejos	7,700	4	37.6	.....	65a	3†	10a	21†	47	T.	.....	T.	T.	0	.....	.....	.....	sw.	J. B. Chapman.
Platoro	...do	9,675	2	.....	.....	.....	.....	.....	.....	.....	0.67	.....	0.44	9.5	4	22	3	5	sw.	Walter R. Hook.
Saguache	Saguache	7,740	18	39.1	+ 6.0	66	3	10	28	47	1.20	+ 0.95	1.00	10.0	2	19	6	5	w.	Eugene Williams.
San Luis	Costilla	7,794	19	38.1	+ 4.3	67	8†	6	20	52	0.27	− 0.15	0.13	2.3	5	18	9	3	sw.	P. B. Albright.
Wagon Wheel Gap	Mineral	8,434	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Eland.
New Mexico.																			
Agricultural College	Dona Ana	3,893	44	52.0	+ 2.5	82	1	26	12†	50	0.11	− 0.33	0.11	0.0	1	17	13	0	sw.	New Mexico Agri. College.
Alamogordo (near)	Otero	4,338	9	52.1	.....	84	3	24	21†	47	1.10	.....	0.56	0.0	3	21	8	1	sw.	Geo. C. Bemis.
Alamogordo	...do	4,320	1	.....	.....	.....	.....	.....	.....	.....	1.12	.....	0.98	0.0	2	.....	.....	.....	.....	El Paso & Southwest. R. R.
Albuquerque	Bernalillo	5,000	34	.....	.....	.....	.....	26	30	.....	0.73	+ 0.22	0.51	0.0	4	20	9	1	s.	Pitt Ross, C. E.
Ancho	Lincoln	6,112	1	.....	.....	.....	.....	.....	.....	.....	0.15	.....	0.15	0.0	1	26	0	4	w.	El Paso & Southwest. R. R.
Artesia	Eddy	3,350	2	53.3	.....	84	24	25	21	50	0.66	.....	0.60	0.0	4	22	1	7	se.	Will Benson.
Aspen Grove Ranch	Rio Arriba	9,000	1	.....	.....	.....	.....	.....	.....	.....	1.15	.....	0.44	10.2	4	19	6	5	.....	Junius D. Maupin.
Bateman's Ranch	...do	8,900	1	.....	.....	.....	.....	.....	.....	.....	1.12	.....	0.60	13.2	4	20	6	4	w.	John W. Bateman.
Bluewater	Valencia	6,732	8	40.2	.....	70	2†	11	30	53	0.77	.....	0.51	0.5	5	18	5	7	w.	Bluewater Development Co.
Bluewater Reservoir	...do	9,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Boas	Chaves	4,154	1	48.6	.....	76	12	19	21	51	0.06	.....	0.06	0.0	1	21	7	2	s.	D. C. Savage.
Capitan	Lincoln	6,348	1	.....	.....	.....	.....	.....	.....	.....	1.01	.....	0.86	2.0	3	21	6	3	n.	El Paso & Southwest. R. R.
Carlsbad	Eddy	3,120	15	56.3	+ 2.9	88	24	26	22†	55	0.12	− 0.61	0.12	0.0	1	24	2	4	se.	U. S. Reclamation Service.
Carrizozo	Lincoln	5,429	2	49.1	.....	80	9	22	11	48	0.05	.....	0.05	0.0	1	29	1	0	sw.	El Paso & Southwest. R. R.
Carson Park	Taos	7,650	.....	.....	.....	.....	.....	.....	.....	.....	0.84	.....	0.50	7.0	5	.....	.....	.....	.....	Lester S. Myers.
Chama	Rio Arriba	7,851	11	37.4	− 0.4	64	3	14	28†	40	0.79	− 0.48	0.40	7.3	3	23	4	3	sw.	Frank C. Johnson.
Cloudcroft	Otero	8,650	7	40.7	.....	65	13	20	9	36	0.15	.....	0.15	T.	1	20	5	5	sw.	El Paso & Southwest. R. R.
Corona	Lincoln	6,666	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Coyote	...do	5,800	1	.....	.....	.....	.....	.....	.....	.....	1.04	.....	0.55	0.0	3	17	8	5	sw.	Do.
Cundiyo	Santa Fe	6,889	1	.....	.....	.....	.....	.....	.....	.....	0.89	.....	0.50	.....	4	20	1	9	w.	Teofilo Vijil.
Demonstration Farm	San Miguel	6,800	1	.....	.....	.....	.....	.....	.....	.....	0.45	.....	0.25	2.2	2	.....	.....	.....	.....	Erb & Westerman.
Duran	Torrance	6,272	1	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.50	1.0	1	20	5	5	.....	El Paso & Southwest. R. R.
Elk (near)	Chaves	7,400	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Boyd Williams.
Escondido	Otero	4,014	1	.....	.....	82	1†	.....	.....	.....	0.44	.....	0.32	0.0	2	18	9	3	w.	El Paso & Southwest. R. R.
Espanola	Rio Arriba	5,590	12	.....	.....	.....	.....	18	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. E. F. McBride.
Estancia	Torrance	6,140	5	49.8	.....	78	1	17	30	55	0.54	.....	0.45	5.0	2	19	9	2	e.	New Mex. Cent. R. R.
Fort Stanton	Lincoln	6,231	32	46.5	+ 4.7	77	1	21	17†	51	0.77	− 0.07	0.55	T.	4	23	3	4	w.	U. S. Sanitarium.
Fort Sumner	Guadalupe	3,960	2	49.4	.....	80	24	15	30	52	0.15	.....	0.15	0.0	1	27	3	0	ne.	F. A. Manzanares.
Gallinas	Lincoln	6,635	1	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.60	0.0	3	19	3	8	w.	El Paso & Southwest. R. R.
Gallinas Planting Station	San Miguel	7,500	3	42.6	.....	73	11	11	16	44	0.69	.....	0.31	7.5	4	21	6	3	w.	U. S. Forest Service.
Harvey's Upper Ranch	...do	9,400	1	.....	.....	.....	.....	.....	.....	.....	0.87	.....	0.37	16.5	4	18	11	1	nw.	Simon B. Warner.
Hillsboro	Sierra	5,224	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. Frank I. Givens.
Hodges	Taos	8,484	1	.....	.....	.....	.....	.....	.....	.....	0.32	.....	0.21	3.3	3	19	4	7	nw.	A. Porter.
Hondo Reservoir	Chaves	3,904	1	51.8	.....	84	24	22	21†	53	0.32	.....	0.32	0.0	1	22	6	2	s.	U. S. Reclamation Service.
Hope	Eddy	4,000	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. W. Board.
Hopewell	Rio Arriba	9,500	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John T. Blanton.
Jemez Springs	Sandoval	6,100	.....	44.8	.....	67	16	24	21†	37	1.42	.....	0.86	T.	6	18	4	8	sw.	Linus L. Shields.
Knowles (near)	Eddy	4,300	.....	51.7	.....	81	13	20	28	48	0.25	.....	0.25	0.0	1	22	4	4	.....	J. W. Moseley.
Laguna	Valencia	5,840	5	45.9	.....	73	3	22	21	41	0.98	.....	0.80	2.0	2	21	6	3	w.	Gus Weiss.
Lagunita	Guadalupe	4,500	5	48.2	.....	76	8	18	30	46	0.44	.....	0.32	T.	3	23	3	4	w.	P. A. Turnbull.
Lake Valley	Sierra	5,412	5	.....	.....	.....	.....	.....	.....	.....	0.65	.....	0.33	0.0	4	25	5	0	sw.	Wm. P. Keil.
Las Vegas	San Miguel	6,384	23	41.2	+ 0.6	75	8	14	30	54	0.45	− 0.36	0.27	2.0	3	22	5	3	w.	Dr. Wm. Curtiss Bailey.
Liston	Chaves	5,000	.....	.....	.....	.....	.....	.....	.....	.....	0.32	.....	0.32	0.0	1	20	7	3	sw.	H. G. Liston.
Los Lunas (near)	Valencia	4,900	20	45.5	+ 3.2	73	3	18	28†	46	0.26	− 0.16	0.26	0.0	1	20	8	2	.....	Richard Pohl.
Los Tanos	Guadalupe	4,919	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	El Paso & Southwest. R. R.
Magdalena	Socorro	6,557	5	45.3	.....	72	11†	19	21	47	0.67	.....	0.45	2.0	3	22	6	2	w.	Wm. Pender.
Mineral Hill	San Miguel	7,050	5	.....	.....	.....	.....	.....	.....	.....	0.59	.....	0.37	7.2	2	5	22	4	sw.	W. M. Nelson.
Monterey	Otero	4,436	1	.....	.....	78	1	.....	.....	.....	0.60	.....	0.45	0.0	2	24	0	6	ne.	El Paso & Southwest. R. R.
Mountainair	Torrence	6,547	8	43.2	.....	71	3	20	30	44	0.86	.....	0.40	5.0	3	22	6	2	sw.	Mrs. John W. Corbett.
Newman	Otero	3,989	1	.....	.....	80	3	30	29	.....	0.75	.....	0.55	0.0	2	26	0	4	ne.	El Paso & Southwest. R. R.
Noria	Dona Ana	4,114	1	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	0.0	1	28	0	2	w.	Do.
Orange	Otero	5,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jas. Brownfield, jr.
Orogrande	...do	4,171	1	.....	.....	.....	.....	.....	.....	.....	0.60	.....	0.50	0.0	2	20	9	1	w.	El Paso & Southwest. R. R.
Oscuro	Lincoln	5,016	1	.....	.....	.....	.....	.....	.....	.....	0.75	.....	0.48	0.0	3	.....	.....	.....	.....	Eugene F. Jones.
Otis	Eddy	3,100	1	.....	.....	.....	.....	.....	.....	.....	0.16	.....	0.16	0.0	1	24	3	3	se.	A. M. Hove.
Otto	Santa Fe	6,200	1	.....	.....	.....	.....	.....	.....	.....	0.77	.....	0.48	2.0	4	.....	.....	.....	.....	W. K. Davis.
Pastura	Guadalupe	5,285	1	.....	.....	.....	.....	.....	.....	.....	0.25	.....	0.20	T.	3	20	8	2	sw.	El Paso & Southwest. R. R.
Picacho (near)	Lincoln	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. D. Southworth.
Plainview	Chaves	4,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. P. Adair.
Red River Canyon	Taos	8,956	2	34.8	.....	64	2†	4	17	52	1.06	.....	0.40	14.0	4	18	11	1	w.	Mrs. L. R. Penn.
Rincon	Dona Ana	4,030	12	52.0	+ 2.0	79	2†	22	22†	51	0.46	+ 0.04	0.46	0.0	1	20	6	4	se.	Chas. H. Raitt.
Rio Grande Dam	Sierra	4,265	12	50.8	+ 4.6	77	1†	25	21†	46	0.32	+ 0.03	0.30	0.0	2	26	1	3	se.	U. S. Reclamation Service.
Rosedale	Socorro	6,910	5	44.8	.....	67	9	24	15	35	0.95	.....	0.66	4.0	4	21	2	7	w.	W. H. Martin.
Roswell	Chaves	3,578	12	50.0	+ 1.9	82	24	24	28	50	0.22	− 0.94	0.22	0.0	2	15	10	5	s.	U. S. Weather Bureau.
San Marcial	Socorro	4,439	14	49.2d	.....	73	1†	25	14†	42d	.....	.....	.....	.....	.....	24	2	4	.....	Atch., Topeka & S. F. R. R.
San Rafael	Valencia	6,509	6	45.2	.....	80	1†	20	20†	54	0.84	.....	0.25	2.0	5	13	3	14	nw.	Dr. Chas. M. Grover.
Santa Fe	Santa Fe	7,013	37	41.6	+ 3.4	63	3	24	30	32	0.86	+ 0.08	0.56	2.4	5	20	7	3	ne.	U. S. Weather Bureau.
Santa Fe Canyon	...do	8,000	1	.....	.....	.....	.....	.....	.....	.....	0.07	.....	0.02	0.7	4	18	2	10	n.	Candelario Martinez.
Santa Rosa	Guadalupe	4,624	10	48.8	.....	79	3†	19	30	49	0.46	+ 0.05	0.26	T.	3	22	6	2	w.	John R. Chapman.
Socorro	Socorro	4,600	18	49.4	+ 3.8	83	2	19	21	53	0.34	− 0.25	0.20	0.0	3	29	1	0	nw.	J. J. Leeson.
Stanley	Santa Fe	6,317	1	46.2	.....	72	18	22	2†	48	0.63	.....	0.48	1.0	4	17	10	3	w.	Henry Winan.
Strauss	Dona Ana	4,080	11	.....	.....	.....	.....	.....	.....	.....	0.11	− 0.52	0.07	0.0	2	25	3	2	.....	Southern Pacific R. R.
Swastika Ranch	Valencia	6,400	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Swastika S. & L. Co.
Taft	Guadalupe	5,000	.....	.....	.....	.....	.....	.....	.....	.....	0.09	.....	0.09	0.0	1	19	8	3	s.	A. J. Wilmeth.
Tajique (near)	Torrance	6,900	.....	.....	.....	.....	.....	.....	.....	.....	1.66	.....	0.86	5.0	5	22	4	4	.....	U. S. Forest Service.
Taos	Taos	6,983	12	42.3	+ 3.9	67	9†	18	28	42	0.42	− 0.24	0.21	0.2	5	19	8	3	w.	Alexander Gusdorf.
Taos Canyon	...do	8,959	1	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.21	5.9	5	.....	.....	.....	.....	Leocadio Martinez, jr.
Tecolote	Lincoln	6,539	1	.....	.....	.....	.....	.....	.....	.....	1.15	.....	0.60	1.0	3	22	1	7	w.	El Paso & Southwest. R. R.
Three Rivers	Otero	4,559	1	.....	.....	.....	.....	.....	.....	.....	0.66	.....	0.46	0.0	4	21	3	6	.....	Do.
Tijeras Canyon	Bernalillo	6,214	1	.....	.....	.....	.....	.....	.....	.....	1.14	.....	0.60	1.8	4	22	4	4	sw.	U. S. Forest Service.
Torrance	Torrance	6,433	1	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.50	0.5	1	25	1	4	nw.	El Paso & Southwest. R. R.
Tres Piedras	Taos	8,076	5	37.9	.....	65	11	12	28	44	0.45	.....	0.30	3.0	2	18	9	3	sw.	Edwin B. Seward.
Truchas	Rio Arriba	7,935	1	37.2	.....	64	11	19	6†	44	0.90	.....	0.60	3.0	4	4	26	0	.....	Ignacio Cordova.
Tularosa	Otero	4,436	.....	51.5	.....	79	1	32	20	40	0.16	.....	0.12	0.0	2	25	4	1	w.	Irby L. Fairless.
Vaughn	Guadalupe	5,952	1	.....	.....	.....	.....	.....	.....	.....	0.37	.....	0.32	.....	2	.....	.....	.....	.....	El Paso & Southwest. R. R.
Virsyivia	Taos	7,500	.....	.....	.....	68	6†	14	17	.....	0.48	.....	0.16	4.3	5	21	3	6	s.	Dr. I. N. Woodman.
Winsors	San Miguel	8,200	12	34.5	+ 0.3	56	21	13	15†	41	0.89	− 0.29	0.24	7.0	6	17	5	8	w.	Henry D. Winsor.

TABLE 1.—*Climatological data for November, 1910. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Texas.																				
Abilene	Taylor	1,738	25	56.1	+ 3.5	82	13	29	28	40	0.38	− 0.86	0.31	0.0	3	17	6	7	s.	U. S. Weather Bureau.
Albany	Shackelford	1,429	16	54.7	+ 1.7	85	12†	22	28	45	0.25	− 1.33	0.25	0.0	1	23	1	6	.....	N. L. Bartholomew.
Anahuac§	Chambers	23	1	.....	.....	.....	.....	.....	.....	.....	0.26	.....	0.23	0.0	2	.....	.....	.....	.....	B. H. Collins.
Austin	Travis	593	54	60.8	+ 1.7	80	4†	36	7	32	1.17	− 1.36	0.93	0.0	5	18	6	6	sw.	A. Deussen.
Ballinger	Runnels	1,637	15	57.0	+ 2.7	88	13	29	28	42	0.85	− 0.57	0.85	0.0	1	15	4	11	n.	E. M. Eubank.
Barstow	Ward	2,573	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Denis.
Bay City	Matagorda	53	.....	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	0.0	1	17	4	9	s.	E. C. Quereau.
Beaumont	Jefferson	29	13	62.3	− 0.1	85	10†	30	30	37	0.69	− 3.32	0.26	0.0	5	16	0	14	se.	John Bender.
Beeville	Bee	225	14	67.0	+ 3.9	89	10	36	29	41	0.48	− 1.80	0.41	0.0	3	9	14	7	se.	L. E. Dickey.
Big Spring	Howard	2,396	12	54.6	.....	85	12	25	28	48	0.17	− 1.28	0.13	0.0	3	17	8	5	s.	B. Reagan.
Blanco	Blanco	1,350	14	59.6	+ 1.3	88	12	30	29	43	1.66	− 0.57	1.22	0.0	4	18	7	5	s.	R. C. Crist.
Boerne	Kendall	1,412	18	53.0	− 3.5	81	11	29	30	37	1.34	− 1.38	0.76	0.0	3	9	3	18	n.	F. W. Schweppe.
Booth	Fort Bend	81	9	.....	.....	.....	.....	.....	.....	.....	0.39	.....	0.20	0.0	3	19	0	11	se.	T. R. Booth.
Boquillas	Brewster	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. O. Langford.
Bowie	Montague	1,113	16	57.8	+ 3.8	87	13	24	28	37	0.94	− 1.54	0.92	0.0	2	19	5	6	n.	Craig Anderson.
Brazoria	Brazoria	25	21	65.6	+ 3.5	90	10	29	29	50	0.48	− 3.42	0.40	0.0	4	23	3	4	s.	Mrs. M. A. Stevens.
Brazos	Palo Pinto	801	1	.....	.....	.....	.....	.....	.....	.....	0.38	.....	0.38	0.0	1	18	9	3	n.	Robt. E. Boyett.
Brenham	Washington	350	21	63.6	+ 3.2	87	9	39	29	35	3.21	− 0.55	1.34	0.0	5	8	4	18	n.	Mrs. B. F. Sloan.
Bridgeport	Wise	754	1	.....	.....	.....	.....	.....	.....	.....	0.80	.....	0.80	0.0	1	22	5	3	n.	Claude Strange.
Brighton	Nueces	12	14	70.2	+ 4.1	86	5	45	7†	30	0.98	− 1.37	0.53	0.0	4	20	4	6	se.	G. H. Ritter.
Brownsville	Cameron	38	21	69.5	+ 3.5	87	10	42	29	36	0.20	− 2.00	0.13	0.0	3	.....	.....	.....	e.	U. S. Weather Bureau.
Brownwood	Brown	1,342	20	55.6	+ 0.8	88	23	28	29	48	0.15	− 1.48	0.15	0.0	1	20	5	5	n.	Mrs. Pearl Smith.
Cameron	Milam	.....	2	61.4	.....	86	11†	33	28	40	2.15	.....	1.63	0.0	4	25	2	3	s.	J. E. Watts.
Carmona	Polk	330	2	61.3	.....	89	2	26	29	45	2.18	.....	1.40	0.0	4	18	7	5	s.	M. S. Spitler.
Claytonville	Fisher	2,100	15	53.2	.....	83	13	25	28	45	1.03	− 0.50	0.93	0.0	2	18	3	9	s.	Wm. Lanius.
Coleman	Coleman	1,710	16	59.0	+ 3.4	85	9	34	28	40	0.80	− 0.80	0.80	0.0	1	16	8	6	n.	J. E. Stevens.
College Station	Brazos	308	19	63.7	+ 5.6	86	9	36	29	36	2.26	− 1.58	1.34	0.0	7	16	9	5	s.	Prof. G. S. Fraps.
Colorado	Mitchell	2,066	16	55.4	+ 1.8	88	13	23	29	53	0.88	− 0.59	0.68	0.0	3	21	0	9	s.	R. M. Webb.
Columbia	Brazoria	34	21	64.6	+ 3.3	86	10	34	7	39	0.22	− 3.54	0.22	0.0	1	23	3	4	s.	R. B. Loggins.
Columbus	Colorado	206	6	.....	.....	.....	.....	.....	.....	.....	0.88	.....	0.46	0.0	5	12	11	7	n.	Mrs. Sophie Bridge.
Comstock	Valverde	1,557	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Prosser.
Corpus Christi	Nueces	20	23	67.8	+ 4.4	85	24	48	28	29	0.29	− 2.12	0.26	0.0	4	10	13	7	se.	U. S. Weather Bureau.
Corsicana	Navarro	445	21	60.0	+ 1.8	85	12†	32	28†	45	0.28	− 2.98	0.12	0.0	4	19	3	8	se.	E. L. Gibson.
Crockett	Houston	350	6	61.8	.....	87	10	32	28	37	2.50	.....	1.55	0.0	5	17	8	5	s.	A. M. Rencher.
Cuero	De Witt	177	21	63.4	+ 1.7	94	12	32	29	43	0.45	− 2.59	0.25	0.0	4	11	0	19	s.	H. R. Frobese.
Dallas	Dallas	466	21	57.6	+ 2.9	92	24	28	29	46	0.11	− 2.85	0.06	0.0	3	20	2	8	n.	G. A. Eisenlohr.
Danevang	Wharton	145	14	66.0	+ 3.5	86	11	32	29	40	0.50	− 3.40	0.50	0.0	1	27	2	1	se.	H. P. Hermansen.
Decatur	Wise	1,047	14	.....	.....	.....	.....	.....	.....	.....	0.94	− 1.55	0.94	0.0	1	15	9	6	.....	Fort Worth & Denver Ry.
Del Rio	Valverde	952	4	62.2	+ 2.9	92	24	36	29	48	0.12	− 1.66	0.12	0.0	1	13	12	5	se.	U. S. Weather Bureau.
Devine	Medina	653	.....	65.8	.....	87	4†	34	7	42	0.90	.....	0.66	0.0	3	15	9	6	se.	M. A. Keller.
Dialville	Cherokee	575	6	61.0	.....	85	1	33	28	40	2.00	.....	0.95	0.0	4	19	6	5	s.	J. M. B. McKnight.
Dilley	Frio	509	.....	.....	.....	.....	.....	.....	.....	.....	0.70	.....	0.70	0.0	1	.....	.....	.....	.....	John W. Miller.
Dublin	Erath	1,466	15	59.0	+ 4.4	84	24†	32	28	31	0.18	− 1.60	0.18	0.0	1	18	5	7	n.	Jno. O. Shafer.
Duval	Travis	820	21	61.6	+ 1.8	85	24	38	28	28	2.27	− 0.28	1.50	0.0	4	21	0	9	s.	J. C. Edgar.
Eagle Pass	Maverick	800	21	63.6	+ 2.6	89	24	33	30	39	0.12	− 0.98	0.09	0.0	2	9	19	2	.....	Jos. Metcalfe.
Edna	Jackson	71	1	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	E. L. Faires.
El Paso	El Paso	3,762	31	55.0	+ 4.1	78	1	31	22	38	0.03	− 0.56	0.02	0.0	2	22	8	0	nw.	U. S. Weather Bureau.
Encinal	La Salle	558	2	65.7	.....	90	9†	35	29	40	0.46	.....	0.42	0.0	2	12	12	6	n.	H. C. Braden.
Fairland	Burnet	1,000	22	61.1	.....	88	9	31	30	43	1.52	− 0.69	1.33	0.0	3	20	1	9	s.	R. L. Bush.
Falfurrias	Starr	.....	3	68.8	.....	93	10	33	29	47	0.37	.....	0.32	0.0	2	20	8	2	se.	W. A. Gardner.
Flatonia	Fayette	465	2	65.4	.....	88	11	40	29	34	1.42	.....	1.20	0.0	5	19	4	7	s.	Fred W. Laux.
Flint§	Smith	483	.....	60.0	.....	85	24	27	29	40	0.74	.....	0.32	0.0	4	17	7	6	sw.	F. C. C. Carter.
Fort Clark	Kinney	1,050	23	60.3	0.0	86	9†	31	30	36	0.10	− 1.34	0.10	0.0	1	12	11	7	ne.	Post Hospital.
Fort McIntosh	Webb	460	24	70.0	+ 7.5	94	9	39	29	46	0.10	− 0.92	0.10	0.0	1	17	3	10	e.	Do.
Fort Stockton	Pecos	3,050	13	58.8	+ 7.6	90	12	28	28	48	T.	− 0.72	T.	0.0	0	21	6	3	ne.	H. H. Butz.
Fort Worth	Tarrant	670	15	58.6	+ 3.5	87	24	32	28	40	0.14	− 1.43	0.07	0.0	3	17	9	4	s.	U. S. Weather Bureau.
Fredericksburg	Gillespie	1,742	21	58.6	+ 2.7	82	24	33	29	35	0.96	− 1.47	.....	0.0	4	14	8	8	s.	Arthur Striegler.
Gainesville	Cooke	738	21	53.6	− 0.4	82	26	23	17	36	0.93	− 1.34	0.87	0.0	3	.....	.....	.....	.....	J. L. Hickson.
Galveston	Galveston	69	40	65.6	+ 2.7	78	27	46	28	26	0.95	− 3.07	0.33	0.0	5	21	5	4	se.	U. S. Weather Bureau.
Gatesville	Coryell	795	6	58.6	.....	89	3	30	29	45	0.35	.....	0.35	0.0	1	28	2	0	.....	John Ryan.
Georgetown	Williamson	750	15	58.5	+ 0.9	87	13	31	29†	43	1.51	− 1.47	0.84	0.0	4	22	4	4	s.	Prof. R. F. Young.
Gonzales	Gonzales	299	5	.....	.....	.....	.....	.....	.....	.....	1.46	.....	1.10	0.0	3	12	2	16	s.	J. M. Johnson.
Graham	Young	1,040	11	57.0	+ 3.7	93	26	25	27	57	0.46	− 1.65	0.42	0.0	2	27	0	3	n.	C. W. Jonhson.
Grand Saline	Van Zandt	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.32	.....	0.20	0.0	2	19	8	3	n.	F. E. Whittemore.
Grapevine	Tarrant	670	20	58.5d	+ 2.7	87	.....	28	28	.....	0.43	− 2.33	0.40	0.0	2	13d	7d	6d	s.	W. J. Crowley.
Greenville	Hunt	550	10	56.5	+ 0.3	83	24	29	29	38	0.00	− 3.33	0.00	0.0	0	18	0	12	n.	J. P. Regan.
Hallettsville	Lavaca	235	19	64.8	+ 3.5	85	4	34	29	36	0.60	− 2.40	0.60	0.0	1	18	7	5	s.	Dr. J. E. Lay.
Harper	Gillespie	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.15	0.0	3	21	0	9	.....	Christian Fritz.
Haskell	Haskell	4,013	19	53.6	+ 1.8	85	12	27	28	43a	0.75	− 0.72	0.58	0.0	2	18	4	8	s.	P. D. Sanders.
Hebbronville	Duval	.....	3	.....	.....	.....	.....	.....	.....	.....	0.36	.....	0.36	0.0	1	.....	.....	.....	.....	Henry Edds.
Hempstead	Waller	254	6	.....	.....	.....	.....	.....	.....	.....	2.08	.....	1.10	0.0	3	14	5	11	n.	J. H. Hancock.
Henderson	Rusk	500	1	.....	.....	.....	.....	.....	.....	.....	2.03	.....	1.22	0.0	4	14	9	7	.....	M. Kangerga.
Hewitt	McLennan	664	15	.....	.....	.....	.....	.....	.....	.....	0.55	− 1.99	0.55	0.0	1	.....	.....	.....	.....	I. H. Earle.
Hillsboro	Hill	628	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thompson & Campbell.
Hondo	Medina	901	8	62.5	.....	82	4	36	30	35	1.29	− 0.44	0.86	0.0	3	12	12	6	.....	H. E. Haass.
Houston	Harris	138	21	64.8	+ 4.2	87	10	40	29	32	0.88	− 3.01	0.60	0.0	4	10	14	6	se.	U. S. Weather Bureau.
Huntsville	Walker	400	22	61.1	+ 2.2	89	11†	31	29	38	2.39	− 1.41	1.30	0.0	4	11	0	19	se.	W. Y. Barr.
Jayton	Kent	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	25	3	2	n.	Wichita Valley Ry. Co.
Jewett	Leon	496	6	60.1	.....	87	10	33	29	41	1.35	.....	0.85	0.0	3	21	4	5	s.	Earle Adkisson.
Junction	Kimble	1,645	7	54.2	.....	86	11	25	30	50	0.00	.....	0.00	0.0	0	22	0	8	.....	Judge John S. Durst.
Kaufman	Kaufman	448	11	59.0	+ 1.5	85	24	29	28	40	0.05	.....	0.03	0.0	2	20	8	2	n.	B. J. Hubbard.
Keene	Johnson	940	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Industrial Academy.
Kerrville	Kerr	1,650	15	55.0	− 1.0	89	26	31	29	46	0.75	− 2.23	0.30	0.0	4	17	0	13	n.	Mrs. F. Coleman.
Knickerbocker	Tom Green	2,050	6	57.4	.....	86	13	24	28	48	T.	.....	T.	0.0	0	21	3	6	sw.	Jos. Tweedy.
Kopperl	Bosque	576	13	.....	.....	.....	.....	.....	.....	.....	T.	− 2.85	T.	0.0	0	13	8	9	n.	T. A. Johnson.
Lagrange	Fayette	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.81	.....	1.63	0.0	3	19	4	7	s.	August Hermes.
Lamesa	Dawson	2,500	.....	.....	.....	.....	.....	.....	.....	.....	0.54	.....	0.30	0.0	3	.....	.....	.....	.....	S. D. Austin.
Lampasas	Lampasas	1,026	19	56.9	+ 0.6	88	23	28	29†	55	0.45	− 1.70	0.32	0.0	3	23	1	6	s.	Mrs. K. I. Webber.
La Parra	Cameron	38	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jno. G. Kenedy.
Laureles Ranch	Nueces	20	11	.....	.....	.....	.....	.....	.....	.....	0.44	− 1.88	0.44	0.0	1	.....	.....	.....	.....	Matt Cody.
Liberty	Liberty	38	6	58.6	.....	89	10†	28	29†	43	0.82	.....	0.60	0.0	2	13	10	7	s.	Mrs. Fannie Sneed.
Llano	Llano	1,040	19	59.2	+ 1.5	86	9	32	29	40	0.05	− 1.28	0.05	0.0	1	23	5	2	e.	E. W. Torrence.
Llano Grande	Hidalgo	86	2	60.8	.....	93	9	30	28	48	T.	.....	T.	0.0	0	11	16	3	se.	M. D. Wardlow.
Long Lake	Anderson	229	5	.....	.....	.....	.....	.....	.....	.....	0.24	.....	0.24	0.0	2	12	6	12	n.	Geo. W. Ellis.
Longview	Gregg	336	21	59.2	+ 3.4	90	24	32	29†	45	1.88	− 2.22	1.21	0.0	4	15	0	15	se.	C. A. Propst.
Lufkin	Angelina	325	3	60.8	.....	87	14	27	29	45	1.98	.....	1.81	0.0	2	20	5	5	s.	T. A. King.
Luling	Caldwell	418	21	63.4	+ 3.8	83	14	35	29	33	1.76	− 0.66	0.92	0.0	4	14	8	8	s.	John Carter.
Marathon	Brewster	4,043	.....	55.6	.....	80	13	30	28	39	T.	.....	T.	0.0	0	12	11	7	s.	Rev. A. P. Willis.

TABLE 1.—*Climatological data for November, 1910. District No. 8*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Texas—Continued.																				
Marble Falls	Burnet	771	2	.....	.....	.....	.....	.....	.....	.....	1.14	.....	0.94	0.0	5	15	3	12	n.	Wm. Harrison.
Marfa	Presidio	.....	2	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	R. K. Colquitt.
Marshall	Harrison	375	1	58.2	.....	86	5	28	7	45	2.70	.....	1.82	0.0	5	10	14	6	s.	Lee Scott.
Matagorda	Matagorda	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	30	0	0	s.	W. E. McNabb.
Mexia	Limestone	537	6	58.6	.....	86	9	32	28	45	1.29	.....	0.63	0.0	4	6	10	14	s.	Miss Josephine Newman.
Midland	Midland	.....	3	.....	.....	.....	.....	.....	.....	.....	0.08	.....	0.08	0.0	1	15	8	7	sw.	H. J. Elder.
Mission	Hidalgo	.....	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	0.0	0	20	6	4	se.	L. H. Romig.
Mont Belvieu‖	Chambers	65	.....	.....	.....	.....	.....	.....	.....	.....	0.59	.....	0.43	0.0	3	15	7	8	s.	A. R. Shearer.
Mountain View	Pecos	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.02	.....	0.02	0.0	1	.....	.....	.....	.....	Lucius W. Gosselin.
Mount Blanco	Crosby	2,750	22	51.3	+ 2.1	82	13	20	28	48	0.27	− 1.09	0.27	0.0	1	19	4	7	s.	H. C. Smith.
Nacogdoches	Nacogdoches	271	11	58.0	− 0.2	85	12	28	29	42	3.41	− 1.13	2.30	0.0	5	13	5	12	n.	Miss Mary Hofmann.
New Braunfels	Comal	720	21	61.8	+ 3.3	81	4	34	29	32	0.45	− 1.74	0.22	0.0	3	10	14	6	s.	J. Giesecke.
Palestine	Anderson	510	28	60.0	+ 3.1	84	24	34	29	32	1.92	− 1.71	1.25	0.0	6	11	12	7	ne.	U. S. Weather Bureau.
Panter	Hood	1,000	20	.....	.....	.....	.....	.....	.....	.....	0.10	− 2.23	0.10	0.0	1	.....	.....	.....	.....	E. H. Snider.
Pearsall	Frio	629	.....	.....	.....	.....	.....	.....	.....	.....	0.79	.....	0.71	0.0	2	.....	.....	.....	.....	Earnet De Vilbiss.
Pierce	Wharton	102	4	63.5	.....	87	2†	29	29	46	0.43	.....	0.43	0.0	1	6	22	2	.....	R. B. Pointer.
Plainview	Hale	3,370	18	50.0	.....	82	12†	19	28	49	0.35	− 1.11	0.32	T.	2	20	6	4	w.	J. F. Sander.
Port Lavaca	Calhoun	20	9	67.2	.....	88	10	40	19†	32	0.69	.....	0.35	0.0	4	22	4	4	se.	J. H. Bickford.
Post City	Garza	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.58	.....	0.42	0.0	2	23	2	5	s.	W. L. Dodd.
Ricardo	Nueces	57	1	69.4	.....	90	10†	36	29	40	0.06	.....	0.05	0.0	2	20	6	4	se.	Lindsay Waters.
Riverside	Walker	109	6	.....	.....	.....	.....	.....	.....	.....	2.10	.....	0.90	0.0	5	13	0	17	n.	Mrs. C. W. Higdon.
Robert Lee	Coke	1,850	11	55.6	.....	85	9†	26	28†	46	0.01	− 1.81	0.01	0.0	1	22	2	6	s.	H. D. Pearce.
Rockland	Tyler	136	6	.....	.....	.....	.....	.....	.....	.....	2.00	.....	1.20	0.0	3	16	3	11	s.	D. W. Bellamy.
Rossville	Atascosa	558	3	63.7	.....	84	4	34	29	37	1.59	.....	1.35	0.0	3	11	14	5	se.	W. F. M. Ross.
Runge	Karnes	308	15	.....	.....	.....	.....	.....	.....	.....	0.45	− 1.55	0.45	0.0	1	.....	.....	.....	.....	Reiffert & Frobese.
Sabinal	Uvalde	964	6	63.7	.....	87	24	37	29	39	1.01	.....	0.43	0.0	4	17	1	12	sw.	Jas. Johnson.
Salado	Bell	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.21	.....	0.66	0.0	2	16	4	10	s.	L. M. Crockett.
San Angelo	Tom Green	1,847	19	55.5	.....	87	4	27	28	45	T.	− 1.31	T.	0.0	0	23	1	6	sw.	Sam Crowther.
San Antonio	Bexar	701	25	63.4	+ 4.2	83	4	39	29	30	1.38	− 0.40	1.20	0.0	3	11	12	7	s.	U. S. Weather Bureau.
San Augustine	San Augustine	360	1	58.4	.....	85	14	26	29	43	2.75	.....	1.53	0.0	6	13	10	7	.....	F. A. Wilson.
San Juanito‖	Hidalgo	.....	1	70.0	.....	90	10†	37	29	42	0.10	.....	0.10	0.0	1	11	6	13	se.	J. B. McAllen.
San Marcos	Hays	588	17	60.7	+ 0.3	82	4†	33	29	40	2.18	− 0.37	2.00	0.0	2	14	0	16	n.	Miss L. C. Ford.
San Saba	San Saba	1,712	6	57.7	.....	86	9	28	28	42	0.31	.....	0.26	0.0	2	21	0	9	n.	Jas. Burns.
Santa Gertrudes	Nueces	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. B. Wright, jr.
Seymour	Baylor	1,320	4	54.2	.....	85	13	26	28	39	1.24	.....	0.97	0.0	3	23	0	7	n.	F. M. Deaver.
Sligo	Yoakum	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. N. Anderson.
Somerville	Burleson	251	1	61.0	.....	86	14†	31	29	40	1.70	.....	1.60	0.0	2	.....	.....	.....	s.	W. A. Dolan
Sonora	Sutton	2,200	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mike Murphy.
Sugarland	Fort Bend	79	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cunningham Sugar Co.
Sutherland Springs§	Wilson	.....	..	65.0	.....	85	3†	30	29	46	1.64	.....	1.50	0.0	4	19	1	10	n.	W. A. Clark.
Taylor	Williamson	583	9	60.8	+ 3.1	84	24	37	29	31	1.63	− 1.01	1.42	0.0	6	20	5	5	n.	U. S. Weather Bureau.
Temple	Bell	630	16	58.4	+ 1.7	79	13†	36	28	28	1.19	− 1.59	0.68	0.0	4	18	8	4	.....	W. Goodrich Jones.
Theodore	Winkler	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	W. H. Gibbs.
Thurber	Erath	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.58	.....	0.46	0.0	2	.....	.....	.....	.....	J. K. Ball.
Tilden	McMullen	.....	4	67.7	.....	96	25	31	29	50	0.61	.....	0.31	0.0	2	13	7	10	nw.	Wm. Kuykendall.
Tivoli	Refugio	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.36	.....	0.36	0.0	1	11	14	5	.....	W. H. Gisler.
Uvalde	Uvalde	937	2	62.8[a]	.....	91	24†	33	29†	45	0.22	.....	0.10	0.0	3	7[a]	6[a]	6[a]	.....	F. M. Getzendaner.
Valley Junction	Robertson	289	10	.....	.....	.....	.....	.....	.....	.....	1.34	− 2.10	0.70	0.0	3	12	3	15	s.	T. M. Williams.
Victoria	Victoria	187	12	67.7	+ 3.0	93	12	35	29	43	0.00	− 3.21	0.00	0.0	0	21	0	9	s.	C. C. Zirjacks.
Waco	McLennan	424	21	60.0	+ 2.5	86	14	33	29	34	0.72	− 1.95	0.66	0.0	2	15	0	15	s.	E. H. Hall.
Waxahachie	Ellis	556	14	57.6	+ 2.7	90	24	25	29	40	0.42	− 2.50	0.17	0.0	4	20	4	6	n.	C. D. Longserre.
Weatherford	Parker	864	21	55.7	+ 0.4	83	24	29	28	40	0.44	− 1.49	0.33	0.0	4	18	7	5	s.	Miss J. Stickfort.
Wharton	Wharton	105	8	63.8	.....	89	10	30	29	41	0.00	.....	0.00	0.0	0	18	1	11	n.	Mrs. F. M. Hughs.
Wills Point	Van Zandt	524	5	58.6	.....	86	24	30	30	42	0.62	.....	0.37	0.0	3	16	2	12	s.	W. W. Gibbard.
Zapata	Zapata	300	1	68.8	.....	93	9	34	29	45	0.25	.....	0.10	0.0	3	9	18	3	se.	F. H. Earnest.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 8, Texas and Rio Grande Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Colorado.																																
Blanca	Rio Grande				.02									T.	.30	.10 .56	.14			T. .11							.09	.13 .70				0.25 1.90
Cumbres	do																										.15					0.35
Garnett	do				.20 T.									T.	.25	T.	T.			T.							.16	T.				0.41
Hermit	do																															
La Veta Pass	do														T.																	T.
Manassa	do														.19	.25				T.							.09	.14				0.67
Platora	do				T.										T.	1.00	.20			T.												1.20
Saguache	do														.01	.07	T.			T.	.01						.13					0.27
San Luis	do					.02																										
Wagon Wheel Gap	do																															
New Mexico.																																
Agricultural College	Rio Grande				.11											.56												T.				0.11 1.10
Alamogordo (near)	do			T.	.46	.08									.18																	1.12
Alamogordo	do					.94								T.	.06												.16					0.73
Albuquerque	do				.48	.03																					.15					0.15
Ancho	do				T.											.02		.02														0.66
Artesia	Pecos					.60	.02									.23	.21			.44							.25					1.15
Aspen Grove Ranch	Rio Grande					.02								T.	.08	.60				T.								.22				1.12
Bateman's Ranch	do					.22									.13		.02			T.							.05	.06				0.77
Bluewater	do				.51																											
Bluewater Reservoir	do																															0.06
Boaz	Pecos					.06																					.15					1.01
Capitan	do				* T.	.86 .12									T.																	0.12 0.05
Carlsbad	do				.05			T.							*	.50											.15					0.84
Carrizozo	Rio Grande				*	.19									.15		.40										.24					0.79
Carson Park	do																										.15					0.15
Chama	do																															
Cloudcroft	Pecos														.55												.06					1.04
Corona	do					.43										.16												.20				0.89
Coyote	Rio Grande				.03	.50																										0.45
Cundiyo	do				.20			.25							T.		T.										T.					0.50
Demonstration Farm	Pecos				T.	.50																										
Duran	do																															0.44
Elk (near)	do					.32								12																		0.54
Escondido	Rio Grande																										.09					0.77
Espanola	do																		.45									.06				0.15
Estancia	do					.55	.08									.08																0.72
Fort Stanton	Pecos				.15												T.															0.69
Fort Sumner	do				*	.60									.12												.03					0.87
Gallinas	do				.05	.30								T.	.31												.17					
Gallinas Plant'g Station	do				T.	T.	.37								.26	.07			T.													0.52
Harvey's Upper Ranch	do										21										.11						.20					0.32
Hillsboro	Rio Grande																															
Hodges	do					.32																										
Hondo Reservoir	Pecos																															
Hope	do																										.07					1.42
Hopewell	Rio Grande														.07	.30	.12			T.							T.					0.25
Jemez Springs	do			*	.86																											0.98
Knowles (near)	Pecos					.25									.18												T.					0.44
Laguna	Rio Grande				.80										.12																	0.65
Lagunita	Pecos				*	.32								T.	.33												.02					0.45
Lake Valley	Rio Grande				*	.30									.18																	0.32
Las Vegas	Pecos				*	.27																										0.26
Liston	do					.32									T.												T.					
Los Lunas (near)	Rio Grande				.26																											0.67
Los Tanos	Pecos													T.	.45		T.										.12					0.59
Magdalena	Rio Grande				.10										.22												T.					0.60
Mineral Hill	Pecos					.37									.15																	0.86
Monterey	Rio Grande				.45										.49	T.		T.		T.							.13					0.75
Mountainair	do				T.	.24									.20																	0.20
Newman	do					.55																										
Noria	do				.20																											0.60
Orange	do														.10																	0.75
Orogrande	do				.50										.19												.08					0.16
Oscuro	do					.48									T.		T.									T.						0.77
Otis	Pecos				T.	.16										.20	.02										.07					0.25
Otto	Rio Grande					.48									.05																	
Pastura	Pecos				*	.20																										
Picacho (near)	do																															1.06
Plainview (near)	do														.24	.14	.28										.40					0.46
Red River Canyon	Rio Grande														T.																	0.32
Rincon	do					.46									.30												.02					0.95
Rio Grande Dam	do			T.	T.	T.								T.	.66		T.										.19					0.22
Rosedale	do				.09	.01									T.																	
Roswell	Pecos				.18	.04																										
San Marcial	Rio Grande													.25	.17	.12											.13					0.84
San Rafael	do				T.	.17									.03	.04				T.							.23	T.				0.86
Santa Fe	do				.25	.31									.02	T.											.02	.01				0.07
Santa Fe Canyon	do				T.	.02									.17																	0.46
Santa Rosa	Pecos				.26	.03									.20	.06																0.34
Socorro	Rio Grande					.08									.08												.07					0.63
Stanley	do				*	.48																										0.11
Strauss	do				.07	.04																										
Swastika Ranch	do																															0.09
Taft	Pecos					.09									.36	.09											.35					1.66
Tajique	Rio Grande				*	.86										.05				.03							.13					0.42
Taos	do				*	.21									T.	.06	.18			.11								.16				0.72
Taos Canyon	do				T.	.21									.40												.15					1.15
Tecolote	do					.60									.17												.03					0.66
Three Rivers	do				*	.46									.07	.05				T.							.42					1.14
Tijeras Canyon	do					.60									T.																	0.50
Torrence	Pecos				.50										T.	.30			T.								.15					0.45
Tres Piedras	Rio Grande					T.									.20	T.											.10					0.90
Truchas	do				*	.60									12												T.					0.16
Tularosa	do				T.	.04									.03																	0.37
Vaughn	Pecos				.32											.16	.04			.02								.11				0.48
Virsylvia	Rio Grande					.15									.17	.21	.08										.19					0.89
Winsors	Pecos				.03	.21																										
Texas.																											T.					0.38
Abilene	Brazos				T.	.05										.31	T.	.02	T.														0.25
Albany	do					T.										.25	T.	T.	T.														0.26
Anahuac	Coast																	.23	.03														1.17
Austin	Colorado					.07											.13	.93	.02									.02					

TABLE 2.—*Daily precipitation for November, 1910. District No. 8*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Texas—Continued.																														
Ballinger‖	Colorado																.85															0.85
Barstow	Pecos																															
Bay City‖	Colorado																		.30													0.30
Beaumont‖	Neches			.17	T.	T.											.17	.05	.21										.09			0.69
Beeville‖	Coast			.02													.41	.05	T.								T.					0.48
Big Springs	Colorado				T.											.13	.01	.03	T.													0.17
Blanco‖	Guadalupe						.19											.67	.75								T.	.05				1.66
Boerne	San Antonio					.25											.76	.33							T.							1.34
Booth‖	Brazos						.03												.20										.16			0.39
Boquillas	Rio Grande																															
Bowie	Trinity															.92											.02					0.94
Brazoria	Brazos	.02				.40												.04	.02								T.					0.48
Brazos‖	do																.38															0.38
Brenham‖	do					T.	.02				T.					.60	.09	1.34	1.16	T.						T.						3.21
Bridgeport‖	Trinity														T.	.80																0.80
Brighton	Coast						.53											.15	.22									.08				0.98
Brownsville	Rio Grande						.05		T.	.02									.13													0.20
Brownwood‖	Colorado																.15	T.														0.15
Cameron‖	Brazos						.14									T.	1.63	.32									T.	.06				2.15
Carmona	Neches		T.			.26										T.	T.	1.40	.12						T.		T.	.40				2.18
Claytonville	Brazos															.93	T.	.10														1.03
Coleman	Colorado					T.										.80	T.															0.80
College Station	Brazos					.18	.04									.48	.05	1.34	.13									.04				2.26
Colorado	Colorado					T.										.68	.10	T.	.10													0.88
Columbia	Brazos																	.22														0.22
Columbus‖	Colorado						T.									.20	.10	.10	.46	.02								T.				0.88
Comstock	Rio Grande																															
Corpus Christi	Coast					.26			T.	.01		.01					T.	T.	.01								T.	T.					0.29
Corsicana‖	Trinity					.04	.10											.12										.02				0.28
Crockett	do					.07										.62	.05	1.55	.21													2.50
Cuero‖	Guadalupe															.12		.08									.12	.13				0.45
Dallas‖	Trinity					.02	.03										.06			T.												0.11
Danevang	Coast																	.50														0.50
Decatur	Trinity															.94																0.94
Del Rio	RioGrande																															0.12
Devine	Nueces					.12										T.	12	.66	T.													0.90
Dialville	Neches					.08										.85	.95	.12								T.	T.	T.				2.00
Dilley	Nueces																70															0.70
Dublin‖	Brazos					T.										T.	18															0.18
Duval	Colorado					.06											.64	1.50										.07				2.27
Eagle Pass	Rio Grande					.09																										0.12
Edna	Lavaca																															0.00
El Paso	Rio Grande			T.	T.	.02									.01																	0.03
Encinal	Nueces																	.42				.04										0.46
Fairland	Colorado					.07											1.33											.12					1.52
Falfurrias	Coast						.32			.05								T.															0.37
Flatonia	Guadalupe						.09							T.			.08	1.20	.01								T.	.04					1.42
Flint	Neches					.08										T.	.28	.32	T.								T.	.06					0.74
Fort Clark‖	Rio Grande													T.			T.									.10							0.10
Fort McIntosh	do					.10																											0.10
Fort Stockton	Pecos				T.																											T.
Fort Worth	Trinity	T.			T.	.07										.06			T.								.01	T.					0.14
Fredericksburg	Colorado					.13										T.	*	.78									.05						0.96
Gainesville	Trinity					.05										.87											.01						0.93
Galveston	Coast					.33										.27	.03	T.	.02									.30					0.95
Gatesville	Brazos																	.35															0.35
Georgetown‖	do						.14										.03	.84	.50										T.				1.51
Gonzales‖	Guadalupe						.14											.22	1.10									T.					1.46
Graham	Brazos															.42	.04																0.46
Grand Saline	Sabine					T.										T.	.20										.12						0.32
Grapevine	Trinity				.03											.40																	0.43
Greenville‖	Sabine																																0.00
Hallettsville	Lavaca					T.										T.	T.	.60	T.								T.	T.					0.60
Harper	Colorado				.07												.15	.08															0.30
Haskell	Brazos						.17									*	.58																0.75
Hebbronville	Coast									.36																							0.36
Hempstead‖	Brazos				T.											T.	.78	1.10							T.			.20					2.08
Henderson	Neches				.07												1.22	.53	.21														2.03
Hewitt	Brazos					T.											T.	.55															0.55
Hillsboro	do																																
Hondo	Nueces					.43											.50	.36									T.						1.29
Houston	Coast					T.										.60	T.	.24	T.								T.	.03					0.88
Huntsville‖	Trinity					T.	.25										T.	.69	1.30	T.							T.	.15					2.39
Jayton	Brazos																																0.00
Jewett‖	Trinity				T.						T.		T.			.20	.85	T.										.30					1.35
Junction	Colorado																																0.00
Kaufman	Trinity					T.											.02	.03	T.				T.										0.05
Keene	Brazos																																
Kerrville‖	Guadalupe						.12											.30	.22								.11						0.75
Knickerbocker	Colorado				T.	T.										T.	T.	T.	T.					T.									T.
Kopperl‖	Brazos																T.	T.															T.
Lagrange	Colorado					T.										T.	.09	1.63								T.	.09					1.81
Lamesa	do					.14										.30		.10															0.54
Lampasas‖	Brazos						.09											.32	.04															0.45
La Parra	Coast																																
Laureles Ranch	do																	.44															0.44
Liberty‖	Trinity			T.		T.									T.	T.	T.	T.	.60	T.								T.	.22				0.82
Llano	Colorado															T.	T.	.05															0.05
Llano Grande‖	Rio Grande																T.	T.															T.
Long Lake‖	Trinity						.08									.16		T.															0.24
Longview‖	Sabine						.04										.35	.28											.21					1.88
Lufkin	Neches					T.												1.81	.17															1.98
Luling‖	Guadalupe						.31									.03		.50	.92															1.76
Marathon	Rio Grande																				T.		T.											T.
Marble Falls‖	Colorado					.02	.12										.06	.72	.22								T.							1.14
Marfa	Rio Grande																																	0.00
Marshall	Sabine					.05										.10	.42	.31											1.82					2.70
Matagorda	Coast																																	0.00
Mexia‖	Brazos					.01	.05										.60	.63	T.								T.	T.						1.29
Midland	Colorado														.08																			0.08
Mission	Rio Grande																	T.					T.											T.
Mont Belvieu	Coast			T.												.07		.43	T.									.09					0.59
Mountain View	Pecos				T.													.02		T.														0.02
Mount Blanco	Brazos					.27										T.	T.																	0.27

TABLE 2.—*Daily precipitation for November, 1910. District No. 8*—Continued.

Stations	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Texas—Continued.																																
Nacogdoches‖	Neches				T.	.18			T.						T.	.25	2.30	.43										.25			3.41
New Braunfels	Guadalupe					.22											.21	.02													0.45
Palestine	Trinity				T.	.05					.01					.07	1.25	.48	T.								T.	.06			1.92
Panter	Brazos														T.	.10		T.		T.											0.10
Pearsall	Nueces					.08												.71													0.79
Pierce	Colorado																	.43													0.43
Plainview	Brazos					.32										.03															0.35
Port Lavaca	Coast					.14	.35											.13			.07										0.69
Post City	Brazos					.42										.16	T.														0.58
Ricardo	Coast																	T.	T.	.01	.05						T.				0.06
Riverside‖	Trinity				T.		.20										.30	.60	.90										.10		2.10
Robert Lee‖	Colorado															.01															0.01
Rockland‖	Neches						.45											.35	1.20												2.00
Rossville	Nueces					T.	.04										.20	1.35								T.					1.59
Runge	San Antonio																	.45													0.45
Sabinal	Nueces					.43											.20	.25								.13					1.01
Salado	Brazos																.55	.66													1.21
San Angelo	Colorado														T.	T.	T.														T.
San Antonio	San Antonio					.15											.70	.53								T.	T.	T.			1.38
San Augustine	Neches					.05					T.					.05	.60	1.53	.18	T.						T.		.34			2.75
San Juanito	Coast									.10												T.									0.10
San Marcos‖	Guadalupe																	2.00	.18												2.18
San Saba	Colorado					.05											T.	.26													0.31
Santa Gertrudes‖	Coast																														
Seymour	Brazos					.23										.97	T.	.04									T.				1.24
Sligo	Colorado																														
Somerville	Brazos					T.											.10	1.60	T.								T.				1.70
Sonora	Rio Grande																														
Sugarland‖	Brazos																														
Sutherland Springs	San Antonio												.03			T.	.10	1.50				.01									1.64
Taylor	Brazos					.07					T.					T.	.66	.86	.01							T.		.01	.02		1.63
Temple‖	....do					T.	.06										.22	.68										.23			1.19
Theodore	Pecos																														0.00
Thurber	Brazos					.12										.46															0.58
Tilden	Nueces					T.											.31	.30	T.												0.61
Tivoli	Guadalupe					.30																									0.36
Uvalde	Nueces															T.	.03	.09	T.								.10				0.22
Valley Junction‖	Brazos						.20												.70	.44											1.34
Victoria‖	Guadalupe																														0.00
Waco‖	Brazos					.06											T.	.66													0.72
Waxahachie‖	Trinity					T.	.17										.05	.17									T.	.03			0.42
Weatherford‖	....do					.05	.04										.33										.02				0.44
Wharton‖	Colorado																														0.00
Wills Point	Sabine															T.	.08	.17									T.	.37			0.62
Zapata	Rio Grande																T.	.10			T.	.08	.07								0.25

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 8, Texas and Rio Grande Valley.*

Date.	Colorado.				New Mexico.																Texas.							
	Garnett.		San Luis.		Agricultural College.		Carlsbad.		Fort Stanton.		Mountainair.		Roseclale.		Roswell.		Santa Fe.		Santa Rosa.		Abilene.		Big Springs.		Brownsville.		Corpus Christi.	
	Max.	Min.	Max.	Min.	Max	Min.	Max.	Min.	Max.	Min.	Max	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	60	21	63	20	82	40	82	44	77	34	68	33	65	37	76	41	62	35	68	28	79	55	80	49	81	57	75	59
2....	61	20	65	20	79	38	79	40	73	24	70	26	64	37	65	32	62	30	64	28	61	44	65	43	82	59	78	68
3....	63	22	63	26	77	43	80	39	74	25	71	36	63	40	73	32	63	35	79	30	77	40	80	40	83	58	75	65
4....	62	18	54	39	72	50	75	60	74	44	65	38	61	38	74	45	57	33	65	33	77	58	75	43	82	65	81	68
5....	53	23	55	30	66	51	68	43	69	33	49	32	51	31	45	38	43	32	41	32	58	42	55	41	83	66	83	54
6....	58	14	63	16	67	34	69	40	60	31	48	32	58	31	60	40	55	30	64	33	62	35	60	31	67	54	68	50
7....	60	16	65	17	70	34	78	34	63	29	56	33	62	32	73	32	58	33	75	37	74	44	77	41	75	50	70	51
8....	62	15	67	15	75	28	83	36	67	28	55	31	66	31	77	33	60	32	79	38	76	51	84	42	76	64	73	65
9....	62	14	65	22	75	28	85	42	65	33	55	33	67	36	80	35	60	30	77	31	81	56	75	44	84	68	78	68
10....	61	16	66	20	77	32	72	38	68	25	54	30	63	36	69	34	60	32	75	33	65	48	73	44	87	70	80	69
11....	60	16	67	22	75	28	81	35	.....	.....	57	37	63	37	75	32	62	31	78	35	75	44	81	39	85	68	77	67
12....	58	16	65	21	76	26	83	33	75	24	55	35	62	38	78	29	61	33	76	42	82	55	85	41	83	66	81	64
13....	60	21	64	20	73	33	79	39	74	31	66	31	53	40	71	36	59	33	69	37	82	61	83	51	82	66	80	67
14....	48	24	53	26	63	35	67	47	63	33	52	30	45	28	49	40	45	31	41	32	63	46	73	46	82	67	80	69
15....	43	22	37	22	60	27	60	32	38	27	41	26	44	24	54	29	37	26	53	31	51	39	51	38	82	70	79	73
16....	40	22	38	28	65	31	56	34	50	24	43	32	49	29	44	30	44	27	47	28	45	40	41	34	70	60	74	55
17....	45	14	48	16	66	34	55	40	57	21	55	30	50	29	54	36	45	25	59	27	47	44	45	38	61	55	55	51
18....	46	17	51	15	67	31	66	35	58	29	56	30	51	30	60	30	48	26	58	28	51	38	48	43	67	52	65	51
19....	32	21	55	23	67	32	74	39	60	23	55	28	54	31	62	34	46	27	60	29	61	35	60	37	71	48	65	49
20....	44	11	50	6	62	40	67	40	58	21	51	25	49	26	57	35	46	25	59	29	59	42	60	39	77	56	72	52
21....	50	15	57	13	65	30	71	27	58	25	43	24	56	27	66	25	51	24	68	29	70	38	70	34	77	59	71	59
22....	51	13	58	14	70	26	81	26	67	25	49	27	59	30	75	25	55	29	71	32	76	47	75	46	81	61	77	67
23....	60	14	54	19	72	28	81	36	64	28	61	31	62	33	74	32	56	28	70	33	73	44	75	36	82	62	80	65
24....	61	13	58	20	76	33	88	41	67	41	66	30	62	36	82	35	59	36	78	38	80	49	84	36	84	68	85	65
25....	62	14	61	23	75	32	80	36	70	22	68	30	60	34	76	30	61	33	76	45	81	41	81	35	83	70	76	69
26....	55	13	50	25	70	40	78	32	57	36	60	32	58	34	74	38	52	29	68	31	81	64	79	51	83	70	79	71
27....	43	22	45	22	62	36	72	40	63	34	51	28	49	25	55	37	41	27	59	31	64	37	68	42	86	65	82	57
28....	51	9	51	12	65	30	78	26	56	24	59	25	54	27	71	24	48	26	66	37	58	29	68	25	68	49	66	48
29....	50	11	56	11	71	29	78	36	72	34	59	26	61	31	73	43	53	30	73	24	66	41	72	32	78	42	67	57
30....	53	10	54	14	68	29	69	33	64	22	54	20	58	30	50	28	53	24	49	19	51	34	57	32	75	48	70	52
Mns..	54.5	16.6	56.6	19.6	70.3	33.8	74.5	38.1	64.2*	28.8*	56.4	30.0	57.3	32.3	66.4	33.7	53.4	29.7	65.5	32.0	67.5	44.7	69.3	39.8	78.6	60.4	74.7	60.8

Date.	Texas.																											
	Del Rio.		El Paso.		Fort McIntosh.		Fort Stockton.		Fort Worth.		Galveston.		Hallettsville.		Houston.		Lufkin.		Palestine.		Plainview.		San Antonio.		Seymour.		Taylor.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	83	57	78	47	86	55	83	47	81	61	76	70	82	53	80	61	85	53	80	59	74	44	78	56	75	57	80	55
2....	83	57	76	47	89	60	72	41	66	49	78	69	82	59	83	62	82	52	71	53	61	29	82	58	62	43	74	55
3....	83	57	78	47	86	75	87	42	70	44	69	63	82	56	72	60	74	49	69	46	74	28	80	55	75	39	76	51
4....	82	57	70	55	89	63	81	55	78	59	77	67	85	64	82	60	80	50	79	56	67	50	83	60	78	62	82	64
5....	66	50	66	44	80	63	70	46	57	48	72	54	69	54	73	52	73	50	70	49	57	33	70	52	62	42	68	47
6....	68	42	67	38	76	51	72	40	64	39	62	50	70	35	65	46	65	37	62	40	56	29	65	45	63	31	62	39
7....	72	43	70	40	79	47	80	39	72	44	65	56	72	36	72	45	74	29	69	44	75	31	71	42	70	39	70	41
8....	81	56	74	46	83	58	83	50	76	48	70	63	78	49	76	52	75	37	71	49	78	35	76	54	73	44	74	51
9....	89	54	74	47	94	71	83	52	85	60	73	68	85	65	82	61	82	54	81	58	77	37	82	66	76	54	82	63
10....	80	48	75	43	87	60	74	43	68	52	77	68	85	65	87	62	84	65	79	56	70	34	81	62	64	44	74	58
11....	82	43	77	39	92	50	88	40	74	42	75	64	80	54	85	58	80	50	77	49	75	36	81	56	73	37	78	50
12....	85	49	77	40	87	61	90	42	82	48	74	68	83	62	81	65	86	54	81	55	82	38	82	57	83	48	81	51
13....	84	60	75	43	88	65	86	45	83	61	77	69	84	61	83	64	86	61	81	64	82	41	82	60	85	53	82	59
14....	78	59	65	41	90	65	76	48	70	49	78	70	84	59	85	63	87	56	71	57	58	35	82	64	63	45	74	57
15....	63	45	60	34	84	63	65	48	52	39	73	62	76	59	77	58	72	47	58	44	50	34	76	53	51	37	67	44
16....	54	44	64	36	73	50	53	32	48	40	62	53	59	48	58	49	64	44	45	42	42	24	53	45	46	39	49	43
17....	55	45	64	38	71	52	49	40	56	44	57	50	51	47	51	47	50	43	50	42	50	30	51	46	50	37	49	43
18....	70	40	64	42	72	54	65	30	62	48	55	52	59	49	54	48	50	42	57	47	51	30	62	49	53	38	61	48
19....	68	44	64	39	76	44	72	30	64	40	62	50	65	44	65	46	61	37	63	42	62	25	66	46	60	34	65	46
20....	74	43	63	40	70	48	63	38	63	47	66	57	71	41	74	47	72	35	68	41	71	30	71	45	61	48	70	44
21....	75	40	63	33	71	58	75	33	72	37	71	60	74	52	76	50	75	40	71	48	72	23	72	52	66	34	71	44
22....	77	60	67	31	80	62	80	40	79	53	74	65	80	55	78	59	79	47	74	56	76	31	76	60	73	42	75	53
23....	86	50	70	36	86	59	81	45	78	54	76	69	82	60	82	63	82	57	80	60	71	31	79	61	71	39	80	58
24....	92	44	73	49	81	58	86	50	87	53	76	70	85	66	84	65	84	64	84	64	82	38	82	58	76	42	84	62
25....	80	44	75	38	90	65	84	44	85	45	76	68	83	66	84	68	80	62	77	65	80	35	74	56	77	38	76	60
26....	81	65	68	51	86	71	80	55	80	67	75	70	82	67	79	66	78	63	77	67	77	38	76	66	81	60	76	67
27....	77	47	61	41	82	66	70	50	69	43	78	52	80	72	80	48	80	57	75	43	65	31	77	50	61	40	74	46
28....	68	36	63	34	88	42	75	28	59	32	60	46	73	43	61	41	59	35	56	34	68	19	65	42	56	26	58	37
29....	76	36	67	36	81	39	75	41	70	34	62	51	70	34	70	40	66	27	64	34	71	30	69	39	64	29	68	37
30....	69	40	62	31	78	42	65	30	53	35	60	52	60	39	60	43	56	34	55	41	60	21	62	44	51	30	57	41
Mns..	76.0	48.5	69.0	40.9	82.7	57.2	75.4	42.1	70.2	47.1	70.2	60.9	75.7	53.8	74.6	55.0	74.0	47.7	69.8	50.2	67.8	32.3	73.5	53.3	66.6	41.7	71.2	50.5

Climatological Data for November, 1910.
DISTRICT No. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

GENERAL SUMMARY.

The mild conditions that have been a feature of the autumn continued throughout November. While storms were not absent, they were not attended by the severe conditions that are common in the central and northern parts of the district with the approach of winter. The prevailing temperatures were high for the time of year, a condition that favored precipitation in the form of rain instead of snow in the central and northern parts of the drainage area. The rains greatly improved the supply of water for irrigation in Arizona, but the amount of snow stored thus far this season at high altitudes is small as compared with the average.

The month began with high pressure and cloudless skies throughout the district. On the morning of the 3d the pressure began falling, and an increase of cloudiness was general under the influence of a deep northern low, with loops extending almost to Arizona. By evening a part of the primary low had advanced eastward, leaving a small depression in Nevada that brought rain to Arizona and during the next two days to the adjacent regions in New Mexico, eastern Utah, and Colorado. Clear skies were again general until the 11th, when a low appeared in Nevada and Utah, attended by slowly increasing cloudiness. On the 13th, with the movement of the low southward, rain set in over Arizona, and the next day, the low having deepened meanwhile, precipitation, lasting several days, spread out to eastern Utah, western New Mexico, and western Colorado. The next storm appeared in Nevada on the 18th; it moved rapidly eastward, and the precipitation, generally light and of short duration, was confined to the central portion of the drainage area. While high pressure was the rule during the next 6 days, there was more than the usual amount of cloudiness. On the 25th a low moved rapidly across the district, leaving a portion in Arizona. Rain attended on the 26th and 27th, except in the extreme northern part of the district.

TEMPERATURE.

The mean of the 27 stations reporting was 47.4°, or 2.9° above the normal. By subdivisions the means and departures were: Western Colorado, 37.4°, +5.5°; eastern Utah, 43.7°, +5.8°; western New Mexico, 45.9°, +2.9°; Arizona, 54.3°, +1.3°; and southeastern Nevada, 49.9°. The highest monthly mean was 65.4°, at Mohawk Summit, Ariz., and the lowest, 20.2°, at Corona, Colo. During the first decade temperatures were above the normal, except on 2 or 3 days in southern Arizona. The second decade was cooler than normal in southwestern Arizona and for several days in southwestern Colorado; in the remainder of the district there was an uninterrupted excess, but not so great as during the first decade. The last decade averaged warmer than the normal throughout the district, the excess being marked on the 22d to 25th, inclusive. By subdivisions the extremes were: Western Colorado, 79° and −5°; eastern Utah, 83° and 5°; western New Mexico, 87° and 10°; Arizona, 99° and 16°; southeastern Nevada, 86° and 19°.

PRECIPITATION.

The average precipitation for the 175 stations reporting was 1.32 inch, or 0.47 inch above the normal. An excess was noted on all drainage areas, except the Mimbres. By watersheds the means and departures were: Green, 0.66, +0.11; Grand, 1.19, +0.22; San Juan, 1.50, +0.34; Little Colorado, 1.17, +0.09; Gila, 1.56, +0.61; Mimbres, 0.59, −0.18; and Colorado proper, 1.61, +0.86 inch. The greatest monthly amount was 4.49 inches at Parker, Ariz., and no precipitation occurred at Deming and Hermanes, N. Mex. The average number of days with 0.01 inch or more precipitation was 4.

MISCELLANEOUS.

The percentage of sunshine was generally below the normal. Grand Junction reported 66, Durango 72, Flagstaff 83, Phoenix 75, and Yuma 87 per cent of the possible.

The mean relative humidity was above the normal, the excess being marked in Arizona. The following values were reported: Grand Junction 63, Durango 69, Flagstaff 72, Phoenix 68, and Yuma 60 per cent.

IRRIGATION IN SALT RIVER VALLEY, ARIZONA.

By L. N. JESUNOFSKY, Section Director.

An interesting report of the operations of the Reclamation Service in the Salt River Valley of Arizona for the crop year of 1910 has been made by L. C. Hill, Supervising Engineer, Salt River Valley Project, Phoenix, Ariz.

During the year the Reclamation Service maintained and furnished water through 490 miles of canals for 131,364 acres, the largest area ever watered in the valley. The supply was ample throughout the year, although this has been a season of unusual drought and low water. The lands in crop received more than 5 acre-feet of water, or sufficient to cover each acre 5 feet deep.

The maintenance and operation of the vast system of canals in the Salt River Valley is a more complicated and difficult problem than similar work would be in the northern country, owing to the fact that the duration of the irrigation season covers the entire 12 months of the year. Repairs and enlargements must be carried on in connection with irrigation, for there can be no shutdown of the works.

In the Salt River Valley crops are growing all the time. There the planting and harvesting are under way every month in the year. An enormous amount of work was required to put the irrigation system in its present condition. All of the old canals that were absorbed by the Government were in need of repairs; most of them were too small and had to be enlarged, and many new canals were constructed. At the present time the system is working perfectly, and is probably supplying a larger area than any other single irrigation system in the United States. Agricultural experts declare that the Salt River Valley is without doubt the most fertile and productive agricultural district in the United States.

The most important single factor in the valley's great development this year was an assurance of an abundant supply of water. The guarantee was possible by reason of the enormous reservoir created by the Roosevelt Dam. During the low-water months, when the Salt River is ordinarily dry, the big lake was pouring forth a generous stream of water, which was taken up by the canals and turned upon the dry land. In a year such as the present the Salt River flow, without storage, would have proven inadequate; there would have been a large shortage of crops on all farms and a greatly reduced acreage under cultivation. In fact, it would have been an impossibility for vegetation to have thrived on 1.50 inch of rain that fell during the period February to July, inclusive.

The most important crop, and the most valuable, was alfalfa. Probably 65,000 acres were harvested. More than 5,000 acres were in cantaloupes and melons, besides a fairly large acreage in fruits.

TABLE 1.—*Climatological data for November, 1910. District No. 9, Colorado Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																			
Battle Mountain	Carbon	7,300																	U. S. Forest Service.
Daniel	Uinta	6,740	11																J. M. Van Dervort.
Eden	Sweetwater	6,577	2																Eden Valley L. & I. Co.
Green River	do	6,083	5	35.8	+ 0.3	62	15†	2	27	46	0.05	− 0.46	0.05	1.0	2	22	4	4	w.	Geo. W. Maxon.
Pinedale	Fremont	7,167	4	30.2[1]		54	11	− 5	27	39[1]									U. S. Forest Service.
Rambler	Carbon	9,232																	J. C. Fothergill.
Willow Creek Cabin	Fremont	7,500	2																J. L. Allen.
Colorado.																			
Ashcroft	Pitkin	9,483	8	29.8[4]		53[4]	3†	− 2	20	37[4]	1.30		0.67	19.0	9					Dan McArthur.
Bed Rock	Montrose																		W. B. Weybright.
Breckenridge	Summit	9,536	20	29.4	+ 3.2	52	3†	2	27	37	0.47	− 1.25	0.43	9.0	2	2	24	4	nw.	Mrs. J. G. Thompson.
Cascade	San Juan	8,900	4	38.6		68	9	5	20	47	1.97		0.56	22.5	7	21	5	4		San Juan P. & W. Co.
Chromo	Archuleta	7,500	4	36.6		67	3	6	29	53	0.83		0.70		2	22	6	2	sw.	Lawrence Nolan.
Cochetopa	Saguache	9,088									0.35		0.14	1.8	4	12	14	4	w.	Bessie McDonough.
Collbran	Mesa	6,000	17	41.4	+ 5.2	63	12†	14	20	29	2.11	+ 1.19	0.77	2.5	6	17	7	6	sw.	A. A. Wood.
Columbine	Routt	8,766									0.90		0.20	13.2	6	2	18	10	sw.	Mrs. M. A. Caron.
Columbine Ranch	Delta	6,925									1.93		0.49	11.7	7	13	10	7	s.	Geo. W. Wade.
Corona	Grand	11,660	3	20.8		38	3	− 5	21	34	3.84		1.20	34.0	7				w.	U. S. Weather Bureau.
Crawford (near)	Montrose	6,600		40.2		63	3	15	27	31	1.06		0.60	4.0	4	19	3	8		C. W. Roe.
Crested Butte	Gunnison	8,807		30.6		60	3	0	21†	48	1.61		0.46	16.6	7	17	7	6		Charles L. Ross.
De Beque	Mesa	4,935		45.0		66	3	27	21†	35	1.15		0.63	0.0	2	21	6	3		C. M. Paine.
Delta	Delta	4,965	19	44.4	+ 7.4	79	25	20	21†	51	0.78	+ 0.27	0.37	0.0	4	20	7	3		E. M. Getts.
Dillon	Summit	8,800	1																	Harry T. Hamilton.
Dolores	Montezuma	6,500	1																	Geo. R. Simmons, jr.
Durango	La Plata	6,534	17	40.6	+ 3.4	66	3	18	28	40	1.92	+ 0.72	0.87	4.6	8	16	8	6	nw.	U. S. Weather Bureau.
Eagle	Eagle	6,598	5																	J. M. Witteman.
Eureka	San Juan	10,000	3								1.44		0.39	12.0	6	19	3	8		San Juan P. & W. Co.
Fraser	Grand	8,560		29.0		56	25	− 2	20†	47	0.42		0.22	4.5	2	4	14	12	w.	L. D. C. Gaskill.
Fruita	Mesa	4,510	11	42.6	+ 5.4	70	3	21	8†	45	1.40	+ 0.85	1.01	0.0	4	17	7	6		J. B. Willsea.
Gladstone	San Juan	10,400	3								1.51		0.41	13.8	9	8	14	8	ne.	San Juan P. & W. Co.
Glenwood Springs (near)	Garfield	5,823	12	39.2		64	1†	17	30†	44	1.47	+ 0.55	0.85	0.0	7	21	3	6	w.	E. A. O'Neil.
Grand Junction	Mesa	4,608	19	45.1	+ 5.2	66	9	26	29	36	1.30	+ 0.75	0.78	0.0	7	13	12	5	nw.	U. S. Weather Bureau.
Grandlake	Grand	8,153	2								0.20		0.20	1.5	1	21	4	5		Mrs. Belle Kauffman.
Grand Valley	Garfield	5,089	18	44.0	+ 6.8	78	1	20	20	52	1.58	+ 0.68	0.63	0.0	7	21	6	3		David Evans.
Gunnison	Gunnison	7,670	17	34.8	+ 8.0	61	8	10	8†	51	0.56	− 0.08	0.20		4	15	14	1	sw.	Clarence Adams.
Horsefly	Montrose	8,700									1.20		0.52	13.0	5	10	18	2	sw.	L. J. Finch.
Ironton	Ouray	10,000									0.68		0.23	8.8	5	12	12	6		P. H. Foley.
Kremmling (near)	Grand	7,337	1																	H. A. Howe.
Lake City	Hinsdale	8,686	5	35.4		61	2†	8	20	43	0.57		0.17	6.7	7	18	6	6	s.	J. F. Maurer.
Lay	Routt	6,190	16	37.4	+ 6.9	63	8†	0	27	44	1.32	+ 0.56	0.80	6.0	4	14	6	10		A. G. Wallihan.
Leal	Grand	8,750																		L. J. Wade.
Lujane	Montrose	6,620	4																	U. S. Reclamation Service.
Mancos	Montezuma	6,960	11	40.8	+ 3.6	67	7	16	27	39	1.31	− 0.03	0.59	1.3	5	19	11	0	w.	B. M. Krumpanitzky.
Marble	Gunnison	7,951	1	35.2		59	1†	3	21	41	1.58		0.52	16.0	6	12	10	8	ne.	Homer Harrington.
Marshall Pass	Saguache	10,846	7								0.79		0.21	19.0	7	17	10	3	w.	William D. Lillard.
Meeker	Rio Blanco	6,182	18	39.4	+ 6.6	65	25	12	20	46	1.34	+ 0.34	0.66	4.5	6	14	11	5		T. Baker.
Montrose (near)	Montrose	5,811	21	38.6	+ 2.8	70	10	20	28†	47	0.19	− 0.38	0.10	0.0	2	22	7	1		R. Butterfield.
Nast	Pitkin	7,953		34.0		54	11†	13	20	34	0.74		0.70	9.9	2	15	9	6	w.	Arthur Hanthorn.
Pagoda	Routt	6,500	19								0.63	− 0.35	0.30		4					Shaw Brothers.
Pagosa Springs	Archuleta	7,108	3	36.2		65	3	10	29	49	1.95		0.59	8.0	7	18	2	10		E. T. Walker.
Paonia	Delta	5,694	15	44.8		70	11	25	28	35	1.72		0.65	1.0	5	16	8	6	sw.	J. M. Underwood.
Parshall	Grand		1																	F. A. Field.
Pitkin	Gunnison	9,500	1								0.52		0.20	7.3	4	9	9	12	s.	Mrs. Maggie Cammann.
Rangely	Rio Blanco	5,050	11	40.6	+ 7.6	67	12†	11	21	44	1.07	+ 0.43	0.45	0.5	5	7	12	11	w.	Mrs. C. P. Hill.
Redcliff	Eagle	8,695	15								0.49	− 0.84	0.24	13.0	5	13	7	10		Dorothea Greiner.
Rico	Dolores	8,824	8								1.85		0.54	13.5	6	20	3	7	sw.	Clinton B. Smith.
Rifle	Garfield	5,437		42.2		68	11	19	20	43	0.96		0.52	0.0	3	25	3	2		Horace Mann.
River Portal	Montrose	6,570	4	38.0		61	2†	12	29	35	1.41		0.50	1.5	6	13	8	9		U. S. Reclamation Service.
Sapinero (near)	Gunnison	8,125	8	34.5		59	3	5	20	39	1.71		0.73	13.3	9	18	3	9	w.	W. F. Irving.
Shoshone	Garfield	6,110		42.2		58	1†	24	20	26	1.68		0.61	T.	8	19	2	9		Central Colo. Power Co.
Silverton	San Juan	9,285	6	34.2		62	2	0	27	51	1.36		0.30	14.5	10	18	7	5	s.	A. P. Root, jr.
Silverton (near)	do	9,400	3	29.6		56	2	3	27	42	0.83		0.24	6.8	4	18	5	7	sw.	San Juan P. & W. Co.
Spruce Lodge	Grand	9,600	2								1.41		0.32	16.0	9					H. J. Wills.
Steamboat Springs	Routt	6,683	7																	M. E. Houston.
Tacoma	La Plata	7,300	3	37.6		63	9	14	27	38	2.27		0.75	14.5	6	19	5	6		San Juan P. & W. Co
Terminal Dam	do	8,300	3								3.09		0.80	17.2	7	21	3	6	n.	Do.
Terrill's Ranch	Mesa	7,000									0.98		0.61	T.	5	16	10	4	sw.	A. F. Terrill.
Uncompahgre Pla	Montrose	8,400									1.52		0.65	14.5	6	9	17	4	sw.	Martin Esser.
Whitepine	Gunnison	9,500	10																	C. E. Macy.
Yampa	Routt	8,000	1								0.89		0.43	T.	5	13	10	7	nw.	Percy A. Hughes.
Utah.																				
Baker	San Juan	7,500	1																	Maude A. Palmer.
Basin	Grand	9,500	1																	E. H. Wolf.
Castle Dale	Emery	5,500	11	47.2[2]	+10.4	83	14	20	22†	51[2]	0.95	+ 0.18	0.45	0.0	3					James Jeffs.
Elkhorn	Uinta		12								0.04		0.03	0.4	2	12	10	8		Forest Supervisor.
Emery	Emery	6,260	10	44.0	+ 7.7	69	7	26	20	31	0.65	+ 0.24	0.65	3.0	1	10	3	17	n.	H. C. Wickman.
Escalante	Garfield	5,700	10	43.0	+ 4.0	70	2	18	28	40	0.22	− 0.38	0.12		2	16	0	14		Geo. H. Barney.
Fort Duchesne	Uinta	5,000	22	39.6	+ 6.2	65	1†	15	20	39	0.25	− 0.11	0.20	2.0	2	26	1	3	w.	Post Surgeon.
Fruitland	Wasatch		1	38.0		62	7†	5	27	40	0.05		0.03	0.5	3	11	17	2	sw.	J. Peter Naab.
Grayson	San Juan	5,750	6																	Joseph A. Lyman.
Green River	Emery	4,080	13	44.6	+ 5.3	73	3	23	7†	45	1.09	+ 0.53	1.09	0.0	2	25	2	3		B. F. Miller.
Hanksville	Wayne		1								1.23		1.10	0.0	3	16	12	2	sw.	F. J. Weber.
Hite	Garfield	3,000	11	50.4	+ 3.1	72	9†	30	28†	35	0.85	− 0.11	0.36	0.0	5	19	8	3		John P. Hite.
La Sal	San Juan	7,000	10	44.4[3]		63	2†	26	6†	33[3]	1.37	+ 0.45	1.00		4					Chas. L. Glasmire.
Lea	Wayne	7,000	18																	Michael Hansen.
Manila	Uinta										0.10		0.08	1.0	2	10	19	1	w.	Daniel M. Nelson.
Moab	Grand	4,000	21	46.0	+ 5.1	70	25	23	29†	40	1.12	+ 0.49	0.48	0.0	5	9	15	6		Henry Crouse.
Monticello	San Juan		2																	D. B. Perkins.
Orderville	Kane		1								1.16		0.42		5					F. A. Porter.
Price	Carbon	5,557																		H. C. Smith.
Ranch	Kane	6,700	9	41.0		70	1	18	27	40	2.01		0.82		5	18	2	10	w.	J. W. Seaman.
St. George	Washington	2,880	29	49.7	+ 2.2	79	1	25	28†	46	1.04	+ 0.60	0.55	0.0	4	15	7	8		Joseph T. Atkin.
Scofield	Carbon	7,625	2																	O. E. Jorgensen.
Springdale	Washington		3																	Harriet Flanigan.
Sunnyside	Carbon	5,280	5								1.18		0.60	11.0	5					Henry Cullum.
Teasdale	Wayne	7,000	2								0.91		0.54		2					Josiah Shurtz.
Theodore	Wasatch	5,507	5	38.8		66	3	11	8	47	0.11		0.06	T.	2	9	14	7		M. M. Smith.

TABLE 1.—*Climatological data for November, 1910. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Utah—Continued.																			
Tropic	Garfield	7,000	13	44.8°	+ 7.9	72°	1	18°	28	47°	1.45	+ 0.53	0.89	0.0	4	...	...	...	nw.	E. P. Bolton.
Trout Creek Ranger	Uinta										0.45	.....	0.35	6.0	2	8	15	7	.....	Forest Supervisor.
Vernal	....do	5,050	15	40.2	+ 5.8	65	1	15	20	38	0.17	− 0.67	0.12	0.5	2	18	9	3	.....	S. P. Trim.
New Mexico.																			
Alma	Socorro	5,500	14	47.7	+ 1.4	81	1	21	20†	51	2.01	+ 0.78	0.80	0.0	6	19	5	6	sw.	M. A. Balke.
Aragon	....do	5,856	3	41.0	.....	72	2	13	21†	51	1.30	.....	0.60	.....	3	19	7	4	sw.	John R. Milligan.
Blackrock	McKinley	6,500	2	43.4	.....	71	2	22	22†	43	1.34	.....	0.48	.....	5	18	6	6	w.	Wm. J. Oliver.
Bloomfield	San Juan	5,500	15	44.0	+ 4.6	74	8	18	21	54	0.73	+ 0.17	0.34	T.	3	18	9	3	sw.	Fred Le Clerc.
Cambray	Luna	4,215	11								0.02	− 0.58	0.02	0.0	7	19	5	6	w.	Southern Pacific Co.
Columbus	....do	4,054	1					24	21†		0.19	.....	0.19	0.0	1	24	0	6	sw.	El Paso & Southwest. R. R.
Deming	....do	4,333	33	51.7		82	1†	23	24	52	0.00	− 0.54	0.00	0.0	0	27	2	1	w.	Southern Pacific Co.
Dulce	Rio Arriba	6,767	3	37.6	+ 4.1	65	2†	11	8†	51	1.19	+ 0.53	0.50	4.0	7	16	5	9	w.	G. H. Blakeslee.
Fort Bayard	Grant	6,152	35	50.9	+ 4.4	76	23	27	20	41	0.95	+ 0.26	0.45	0.0	3	24	4	2	nw.	U. S. Gen'l. Hospital.
Fort Wingate	McKinley	6,997	46	42.6	+ 2.0	70	13	18	20	46	0.49	− 0.29	0.20	1.0	3	15	6	9	sw.	Medical Corps, U. S. A.
Fruitland	San Juan	4,800	17	42.7	+ 3.3	73	3	19	21	47	0.67	+ 0.33	0.60	.....	4	21	6	3	nw.	Cyril James Collyer.
Gage	Luna	4,486	3	51.6	.....	85	1	25	30	43	T.	.....	T.	.....	0	27	0	3	w.	Southern Pacific Co.
Gila (near)	Grant	4,470	11	51.1	+ 2.4	87	7	19	16	54	0.20	− 0.75	0.20	0.0	1	...	...	...	.....	T. J. Clark, sr.
Gila Planting Station	....do	6,475	...	48.6	.....	72	1	26	21	36	1.19	.....	0.53	0.0	5	22	3	5	s.	U. S. Forest Service.
Hachita	....do	4,504	1								0.30	.....	0.19	0.0	3	22	5	3	nw.	El Paso & Southwest. R. R.
Haynes	Rio Arriba	6,600	...																.....	Dr. John Roger Haynes.
Hermanas	Luna	4,451	1								0.00	.....	0.00	0.0	0	27	3	0	w.	El Paso & Southwest. R. R.
Lordsburg	Grant	4,245	10	51.8	+ 0.7	84	1	22	23	51	0.26	− 0.26	0.26	0.0	1	22	3	5	sw.	Southern Pacific Co.
Luna	Socorro	7,300	5	37.6	.....	67	1	10	30	48	1.15	.....	0.50	6.0	4	16	12	2	w.	C. B. Martin.
Mimbres	Grant	5,007	5								1.16	.....	0.46	0.0	4	21	8	1	w.	Chas. Dennis.
Pratt	....do	4,415	1								0.50	.....	0.50	0.0	1	21	9	0	sw.	El Paso & Southwest. R. R.
Putnam	San Juan	6,200	...																.....	Miss Elenor L. Quick.
Redrock	Grant	4,150	5								0.99	.....	0.58	0.0	4	17	10	3	.....	Robert H. Woods.
Rodeo	....do	4,118	1								0.79	.....	0.66	0.0	3	26	3	1	.....	El Paso & Southwest. R. R.
Rosa	Rio Arriba	6,000	5																.....	B. A. Candelario.
Arizona.																			
Alliares Ranch	Cochise	4,184	14								1.59	+ 0.73	0.96	0.0	4	21	2	7	n.	Thos. Allaire.
Arizona Canal Dam	Maricopa	1,372	19	61.1	− 1.6	93	2	39	27	44	2.07	+ 1.30	0.76	0.0	5	19	5	6	s.	U. S. Reclamation Service.
Aztec	Yuma	492	12	64.7	+ 1.0	89	1†	44	29†	37	1.05	+ 0.08	0.62	0.0	5	24	1	5	.....	Agent Southern Pacific Co.
Benson	Cochise	3,523	30	54.4	− 1.0	84	12	28	28	52	0.75	+ 0.40	0.35	0.0	3	26	1	3	e.	Do.
Bisbee	....do	5,500	20	53.2	+ 0.9	76	2	35	15†	32	0.61	− 0.09	0.51	0.0	2	22	3	5	w.	Rev. J. G. Pritchard.
Bonita	Graham	4,916	37								0.84	+ 0.12	0.42	0.0	4	19	6	5	sw.	A. Johnson & Co.
Bowie	Cochise	3,756	34	55.5	+ 3.1	82	25	30	6	41	1.18	+ 0.52	0.65	0.0	4	16	8	6	w.	Agent Southern Pacific Co.
Buckeye	Maricopa	980	19	59.4	+ 1.1	91	2	33	28†	48	2.43	+ 1.76	1.21	0.0	5	24	4	2	e.	H. E. Kell.
Camp Verde	Yavapai	3,160	...																.....	T. P. Gabbard.
Canille	Santa Cruz	5,225	1								0.67	.....	0.47	0.0	2	10	13	7	sw.	R. A. Rodgers.
Casa Grande	Pinal	1,396	30	62.8	+ 0.7	93	1	35	28	40	1.13	+ 0.57	0.53	0.0	4	15	8	7	sw.	Agent Southern Pacific Co.
Cave Creek	Maricopa	1,520	4	57.3	.....	91	2	32	27	49	2.93	.....	1.20	0.0	6	22	5	3	.....	E. A. Howard.
Chin Lee	Apache	6,000	2	44.3	.....	76	9	19	20†	53	0.98	.....	0.38	T.	4	17	8	5	s.	Fr. L. Ostermann, O. F. M.
Chiarsons Mill	Graham	8,000	5	43.0	.....	63	3	25	29	28	2.96	.....	1.00	1.0	5	17	8	5	.....	H. R. Chiarson.
Clifton	....do	3,584	20	56.4	.....	84	2	37	22	31	1.52	+ 0.90	0.56	0.0	5	23	5	2	.....	P. Reisinger.
Cline	Gila	2,300	11	54.6	+ 0.3	85	5	31	21	46	2.89	+ 1.07	1.10	0.0	5	22	3	5	sw.	W. M. Clanton.
Cochise	Cochise	4,219	12	59.7	+ 7.5	84	1	31	30	41	0.74	− 0.04	0.64	0.0	2	12	14	4	sw.	Agent Southern Pacific Co.
Columbia	Yavapai	1,900	12	63.0	+ 2.8	99	8	40	16†	46	2.84	+ 1.23	1.40	0.0	5	22	4	4	s.	M. J. Nolan.
Congress	....do	3,688	14	50.2	− 0.3	82	2	41	26	24	3.27	+ 1.47	1.78	0.0	4	14	12	4	sw.	Assayer Congress Mine.
Courtland	Cochise	4,543	1								0.89	.....	0.70	0.0	2	15	15	0	sw.	Agent E. P. & S. W. Co.
Dos Cabezos	....do	5,250	2	48.4	.....	75	6	25	28	42	1.30	.....	1.07	0.0	3	23	4	3	e.	N. Erickson.
Douglas	....do	3,930	7	54.0	.....	89	2	26	30	55	0.66	.....	0.58	0.0	3	23	5	2	sw.	Dr. F. T. Wright.
Dudleyville	Pinal	2,204	20	55.7	− 0.1	86	2	31	19	47	1.96	+ 0.94	0.80	0.0	5	17	6	7	sw.	G. F. Cook.
Fairbank	Cochise	3,862	1								0.40	.....	0.26	0.0	4	21	3	6	.....	Agent E. P. & S. W. Co.
Flagstaff	Coconino	6,907	18	39.9	+ 5.3	68	2	16	20	48	1.28	− 0.12	0.82	1.5	7	18	7	5	e.	U. S. Weather Bureau.
Florence	Pinal	1,504	12	60.6	+ 3.5	88	3	38	27†	48	1.80	+ 1.02	1.10	0.0	3	10	8	12	w.	Agent P. & E. R. R.
Fort Apache	Navajo	5,200	40	46.2	+ 1.3	78	1	21	20	49	2.36	+ 1.19	0.80	0.0	5	23	2	5	sw.	Post Surgeon, U. S. A.
Fort Huachuca	Cochise	5,100	25	52.0	− 1.0	82	7†	22	30	48	1.02	+ 0.03	0.80	0.0	3	24	1	5	se.	Do.
Fort Mohave	Mohave	604	...																.....	A. F. Duclos.
Gilabend	Maricopa	737	20	61.6	+ 2.7	96	1	34	28	44	0.45	− 0.01	0.22	0.0	4	24	4	2	sw.	Agent Southern Pacific Co.
Globe	Gila	3,525	9	53.8	.....	84	1	34	28†	38	2.34	.....	0.88	0.0	5	19	5	6	se.	B. G. Fox, M. D.
Grand Canyon	Coconino	6,866	...																.....	Agent Grand Canyon Ry.
Greer	Apache	9,200	7								1.76	.....	0.62	16.5	5	18	6	6	sw.	Mrs. M. Butler.
Hereford	Cochise	4,180	1								0.64	.....	0.58	0.0	2	20	0	10	sw.	Agent E. P. & S. W. Co.
Holbrook	Navajo	5,069	21	47.0	+ 3.8	77	2	23	21†	51	1.33	+ 0.47	0.60	0.0	3	22	2	6	sw.	T. Larson.
Intake	Gila	2,230	4								1.70	.....	0.85	0.0	4	22	0	8	w.	A. J. Robinson.
Jerome	Yavapai	4,743	14	54.0	+ 2.2	77	2	34	27	26	2.68	+ 1.03	0.82	0.0	8	20	6	4	w.	Dr. L. A. Hawkins.
Keams Canyon	Navajo	6,600	6	43.6	.....	70	2†	17	27	43	1.73	.....	0.63	1.5	6	16	6	8	ne.	L. R. Ballard.
Kingman	Mohave	3,326	9	53.2	.....	84	2	27	27	41	2.48	.....	0.94	0.0	7	14	13	3	ne.	G. R. Gooding.
Lewis Springs	Cochise	4,029	1								0.46	.....	0.28	0.0	4	6	16	8	.....	Agent E. P. & S. W. Co.
Maricopa	Pinal	1,196	35	61.2	+ 1.8	95	1	32	13	44	1.00	+ 0.37	0.60	0.0	3	24	2	4	.....	Agent Southern Pacific Co.
Mesa	Maricopa	1,244	16	57.8	− 1.2	90	1	33	28	50	2.59	+ 1.66	1.02	0.0	5	16	2	12	ne.	C. L. Diehl.
Mohawk Summit	Yuma	538	9	65.4	.....	88	2	50	14†	39	0.15	.....	0.15	0.0	1	20	5	5	e.	Agent Southern Pacific Co.
Naco	Cochise	4,579	1								0.32	.....	0.32	0.0	1	17	11	2	w.	Agent E. P. & S. W. Co.
Natural Bridge	Gila	4,990	21								3.86	+ 1.84	1.25	0.0	7	21	4	5	sw.	D. G. Goodfellow.
Nogales	Santa Cruz	3,830	...																.....	Wallace & Summerhayes.
Oracle	Pinal	4,500	19	55.0	+ 0.3	76	2	39	27	26	2.19	+ 0.87	0.77	0.0	5	21	3	6	sw.	W. H. Winters.
Osborn	Cochise	4,676	1								0.81	.....	0.70	0.0	3	22	1	7	sw.	Agent E. P. & S. W. Co.
Paradise	....do	3,940	5	49.1	.....	81	10	22	22	53	0.90	.....	0.70	0.0	2	21	0	9	.....	J. C. Hancock.
Parker	Yuma	345	15	59.8	+ 0.2	96	1	28	29	54	4.49	+ 3.87	1.95	0.0	4	23	2	5	sw.	H. V. King, M. D.
Payson	Gila	5,500	2	50.0	.....	84	1	22	21	53	2.89	.....	0.76	0.0	6	21	1	8	.....	M. McDonald.
Phoenix	Maricopa	1,108	16	60.2	+ 1.5	88	2	39	27	40	1.61	+ 0.65	1.08	0.0	5	22	3	5	e.	U. S. Weather Bureau.
Pinal Ranch	Pinal	4,520	16								3.23	+ 0.65	1.17	0.0	6	19	6	5	.....	Irion & Craig.
Pinto	Apache	5,660	6								0.99	.....	0.33	T.	4	23	1	6	sw.	Mrs. C. F. Herring.
Prescott	Yavapai	5,320	44	46.2	+ 2.3	74	2	22	30	45	2.23	+ 1.10	0.50	0.0	7	19	0	11	.....	J. W. Flinn, M. D.
Quartzsite	Yuma	800	3	59.6	.....	86	1†	34	28†	38	3.31	.....	1.20	0.0	4	23	4	3	n.	W. E. Scott.
Redrock	Pinal	1,856	3	59.4	.....	86	2	38	28†	38	2.34	.....	1.52	0.0	5	18	7	5	w.	W. J. Crowell.
Roosevelt	Gila	2,175	6	56.6	.....	88	1	38	20	38	3.13	.....	0.90	0.0	8	19	4	7	.....	W. A. Schoenfeld.
Sacaton	Pinal	1,280	3	59.6	.....	92	2	33	30	51	2.36	.....	1.20	0.0	5	20	4	6	.....	E. W. Hudson.
St. Johns	Apache	5,650	8	44.6	.....	74	11†	16	30	52	1.35	.....	0.85	0.0	3	19	5	6	sw.	A. Shreeve.
St. Michaels	....do	6,950	24	42.6	+ 6.8	70	2	18	30	46	0.84	− 0.18	0.40	1.0	3	23	0	7	sw.	Rev. A. Weber, O. F. M.
Salome	Yuma	1,875	3	55.8	.....	97	1†	28	23	42	2.97	.....	2.10	0.0	4	20	7	3	s.	Mrs. M. B. Swartz.
San Carlos	Gila	2,456	29	54.4	+ 1.7	89	11	28	30	56	1.82	+ 0.95	0.67	0.0	5	21	1	8	w.	F. S. Thomas.
San Simon	Cochise	3,609	24	56.6	+ 1.6	84	1†	31	28	45	0.87	+ 0.51	0.62	0.0	4	19	7	4	sw.	Agent S. P. Co.
Seligman	Yavapai	5,219	5	47.2	.....	74	2	28	21	38	1.17	.....	0.66	T.	4	18	9	3	sw.	C. W. Dougherty.
Sentinel	Maricopa	685	12	62.7	− 0.4	89	2	43	19†	39	0.62	+ 0.16	0.50	0.0	2	26	0	4	.....	Agent S. P. Co.
Show Low	Navajo	6,300	...																	Zora Hall.

TABLE 1.—*Climatological data for November, 1910. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Arizona—Continued.																			
Silverbell	Pima	2,650	5	61.7	.....	87	1	37	24	39	2.93	.....	1.90	0.0	5	23	4	3	nw.	Imperial Copper Co.
Snowflake	Navajo	5,644	1	43.8	.....	72	2	18	30	47	0.86	.....	0.30	0.0	5	14	7	9	sw.	W. J. Flake.
Supai	Coconino	3,200	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. E. Coe.
Tempe	Maricopa	1,165	6	58.7	.....	88	2	26	27†	44	2.42	.....	0.71	0.0	6	24	2	4	e.	F. H. Simmons.
Thatcher	Graham	2,800	8	51.6	.....	82	1	25	23†	47	1.21	.....	0.75	0.0	5	18	11	1	nw.	Prof. J. H. Larson.
Tombstone	Cochise	4,550	14	55.5	+ 0.9	78	2†	35	27	32	0.52	− 0.14	0.43	0.0	2	21	8	1	.....	F. N. Walcott.
Truxton	Mohave	4,197	1	51.4	.....	80	2	30	27†	41	2.59	.....	1.60	0.0	4	20	5	5	.....	S. M. Atkinson.
Tuba	Coconino	4,500	12	45.0	+ 1.2	74	2	23	21†	41	1.23	+ 0.48	0.78	0.0	5	9	15	6	n.	G. H. Krauss.
Tucson	Pima	2,390	31	58.0	− 0.6	92	2	34	28	51	1.32	+ 0.51	0.64	0.0	5	10	18	2	nw.	University of Arizona.
Vail	do	3,421	12	57.4	− 5.2	90	2	34	13†	48	1.47	+ 0.58	0.60	0.0	5	18	6	6	sw.	Agent S. P. Co.
Walnut Grove	Yavapai	3,649	16	.....	.....	.....	.....	.....	.....	.....	2.42	+ 0.85	0.65	0.0	6	17	7	6	.....	J. O. Carter.
Wickenburg	Maricopa	2,072	13	56.2	+ 1.5	87	1	32	27	50	2.05	+ 1.45	1.30	0.0	4	24	2	4	w.	Agent S. F. P. & P. Ry.
Willcox	Cochise	4,164	29	51.8	− 0.4	80	8†	25	23†	50	1.12	+ 0.63	0.67	0.0	2	20	0	10	sw.	Agent S. P. Co.
Williams	Coconino	6,750	12	43.6	+ 1.8	75	3	20	30	49	1.01	− 0.57	0.50	1.0	5	14	14	2	.....	E. J. Nordyke.
Winslow	Navajo	4,853	9	47.0	.....	75	25	20	21	45	0.86	.....	0.35	0.0	3	22	1	7	.....	J. F. Bauer.
Yarnell	Yavapai	4,700	13	.....	.....	.....	.....	.....	.....	.....	3.51	+ 1.31	1.30	0.0	5	14	0	16	s.	E. L. Bartholomew.
Yuma	Yuma	141	31	62.3	+ 0.4	94	2	37	27	44	1.58	+ 1.26	1.20	0.0	3	26	2	2	n.	U. S. Weather Bureau.
Nevada.																				
Caliente	Lincoln	4,407	....	45.0	.....	76	5	19	29	48	0.10	.....	0.08	0.0	3	23	2	5	ne.	Agent Salt Lake Route.
Las Vegas	Clark	2,033	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Salt Lake Route.
Logan	do	1,700	3	54.8	.....	86	2	28	30	44	0.94	.....	0.59	0.0	4	9	12	9	n.	Ray. M. Filcher.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
¶ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 9, Colorado Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Battle Mountain	Snake																															
Daniel	Green																															
Eden	do																		T.	T.			.01				.05					
Green River	do																															
Pinedale	do																															
Rambler	Snake																															
Willow Creek Cabin	Green																															
Colorado.																																
Ashcroft	Grand				.67										.03	.10		.05	.08	.17	.05		.05	T.				.10				1.30
Bed Rock	Dolores																															
Breckenridge	Grand				.43					T.						T.	T.	T.		T.		T.	T.	T.			T.	.04	T.			0.47
Cascade	San Juan				.40										.34	.56	.05			.38							12	.12				1.97
Chromo	do				.13											.70																0.83
Cochetopa	Gunnison					.14									T.	.10	T.	T.	T.	.02			T.					.09				0.35
Collbran	Grand				.49											.77	.08	.01		.48			T.					.28				2.11
Columbine	Yampa															T.	.20	T.	.10				.20	.10			.20	.10				0.90
Columbine Ranch	Gunnison				.49											.31	.16	.07		.44							•	.46				1.93
Corona	Grand			•	•	1.30										T.	1.20	1.10										.18	T.	.06		3.84
Crawford (near)	Gunnison				.21											.60	.10			.15												1.06
Crested Butte	do			.39												.46		.09	.05				.14	.20				.28				1.61
De Beque	Grand													T.		.63		T.		.52												1.15
Delta	Gunnison					.10									.37					.09								.22				0.78
Dillon	Grand																															
Dolores	Dolores																															
Durango	San Juan			.08	.15	.01								.05	.75	.32				.14							.42					1.92
Eagle	Grand																															
Eureka	San Juan			.27											.13	.14	.13	T.		.39							.38	T.				1.44
Fraser	Grand				.20											T.	.22			T.			T.	T.				T.				0.42
Fruita	do				T.										.04	1.01	T.			.33				.02			T.					1.40
Gladstone	San Juan			T.	.25									T.	.11	.41	.02	.10	.01	.37	T.	T.	T.	.05			.19	T.				1.51
Glenwood Springs (nr)	Grand			•	.85											.12	.14	.10	.04	.22			T.									1.47
Grand Junction	do				.06									.01	.49	.41		T.	.06	.21							.07					1.30
Grandlake	do			T.											.20	T.								T.	T.	T.		T.	T.			0.20
Grand Valley	do			.22											.01	.63	.04	.04	T.	.47							T.	.17				1.58
Gunnison	Gunnison				.18											.20				.12								.06				0.56
Horsefly	do				.09	.14										.52				.34									.11			1.20
Ironton	do				.17										T.	.04	.06	T.		.23								.18				0.68
Kremmling (near)	Grand																															
Lake City	Gunnison				.08										.08	.08	.05			.17							.04	.07				0.57
Lay	Yampa															.80		T.		.12			.30				.10					1.32
Leal	Grand																															
Lujane	Gunnison																															
Mancos	San Juan														.59	.23				.19							.20	.10				1.31
Marble	Grand				.52											.34	.03			.22				.03				.44				1.58
Marshall Pass	Gunnison				.21										T.	.13	.04		.12	.09			.08					.12				0.79
Meeker	White				.05											.66		T.		.33			.10				•	.20				1.34
Montrose (near)	Gunnison															.10				.09												0.19
Nast	Grand				.70											T.	T.	T.	.04	T.			T.					T.				0.74
Pagoda	Yampa															.30				15			.12					.06				0.63
Pagosa Springs	San Juan				.46										.20	.59	.09			16							.36	.09				1.95
Paonia	Gunnison				.29											.65	.12			.26								.40				1.72
Parshall	Grand																															
P'tkin	Gunnison			.20	T.								T.	T.		.13				.14								.05				0.52
Rangely	White				.03											.15				.45							.41	.03				1.07
Redcliff	Grand				.24	T.										T.	.03	.03		.11	T.						.08					0.49
Rico	Dolores				.41	.08									.43	.24				.54							.15					1.85
Rifle	Grand				.10											.52				.34												0.96
River Portal	Gunnison			.50										•	.35		.02		.25								.29					1.41
Sapinero (near)	do				.37											.73	.05	.04		.23			.02	.06			.08	.13				1.71
Shoshone	Grand			•	.61										•	.60	T.	.06	T.	.34			.02	T.				.05				1.68
Silverton	San Juan				.17	.02									.15	.20	.05	.02		.30	.05						.30	.10				1.36
Silverton (near)	do													T.	.22	.24	T.			.21							.16	T.				0.83
Spruce Lodge	Grand				.32											.10	.19	.12	.07	.18	.03		.22					.18				1.41
Steamboat Springs	Yampa																															
Tacoma	San Juan				.20										.60	.75	.20			.20							.32					2.27
Terminal Dam	do			.60	.80										.54	.50	.05			.27							.33					3.09
Terrill's Ranch	Grand															.03	.61	.01			.28						.05					0.98
Uncompahgre Plateau	Gunnison				.65											.12				.46	.04						.09	.16				1.52
Whitepine	do																															
Yampa (near)	Yampa				.12					T.						.43	.13	T.		.08			.13									0.89
Utah.																																
Baker	Colorado																															
Basin	Grand																															
Castle Dale	Green		.20													.45	.30															0.95
Elkhorn	do																			.01								.03				0.04
Emery	Colorado															.65				T.												0.65
Escalante	do															.10											.12					0.22
Fort Duchesne	Green																			.05							.20					0.25
Fruitland	do														T.					.03				.01			.01					0.05
Grayson	San Juan																															
Green River	Green														•	1.09																1.09
Hanksville	Colorado														1.10	.11											.02					1.23
Hite	do			T.											.36	.26	T.			.12							.01	.10				.85
La Sal	Grand				.07										•	1.00	T.											.30				1.37
Loa	Colorado																															
Manila	Green																			.02			.08				T.					0.10
Moab	Grand				.04										.35	.12				.48							.13					1.12
Monticello	do																															
Orderville	Colorado				.07									.41	.19	.42			.07													1.16
Price	Green																															
Ranch	Colorado			T.	.15									.72	.82					.10								.22				2.01
St. George	do													.55	.15				.25							.09						1.04
Scofield	Green																															
Springdale	Colorado																															
Sunnyside	Green														.02	.50	.04	.02										.60				1.18
Teasdale	Colorado														.54	.37																0.91
Theodore	Green														T.	T.				.06				T.			.05					0.11
Tropic	Colorado			.05	.18								T.	T.	.89	.33																1.45
Trout Creek Ranger	Green																			.10							.35					0.45
Vernal	Green																			.12							.05					0.17
New Mexico.																																
Alma	Colfax				.60	.10								•	.80	.03											.48					2.01
Aragon	do				.55									T.	.60	T.										.15						1.30

TABLE 2.—*Daily precipitation for November, 1910, District No. 9*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
New Mexico—Cont'd.																																
Blackrock	Little Colorado													.10	.44	.48	.10										.22					1.34
Bloomfield	San Juan					T.								T.	.25	.14			T.								.34					0.73
Cambray	Mimbres														.02																	0.02
Columbus	Gila				T.	.19																										0.19
Deming	Mimbres																															0.00
Dulce	San Juan				.04										.25	.50	.02			.05							.30	.03				1.19
Fort Bayard	Mimbres				.40									.45												.10						0.95
Fort Wingate	Little Colorado				T.									.20		.20											.09					0.49
Fruitland	San Juan					.05									*	.60			T.	T.							.02					0.67
Gage	Mimbres														T.																	T.
Gila	Gila																									.20						0.20
Gila Planting Station	Mimbres			T.	.49	.04								T.	.46	.02	T.										.18					1.19
Hachita	Gila			.01	.10										.19																	0.30
Haynes	San Juan																															
Hermanes	Gila																															0.00
Lordsburg	do				.20																											0.26
Luna	do					.40								.05	.50	T.											.20					1.15
Mimbres	Mimbres				.28	.18								.46													.24					1.16
Pratt	Gila													.50																		0.50
Putnam	San Juan																															
Redrock	Gila				.27	.07									.58												.07					0.99
Rodeo	do			T.	.03	.10									.66												T.					0.79
Ross	San Juan																															
Arizona.																																
Allaires Ranch	Sonora			.07	.96									.50													.06					1.59
Arizona Canal Dam	Salt				.61									.29	.76	.02											.39					2.07
Aztec	Gila			.20	.13	.03								.07		.62																1.05
Benson	San Pedro			.15	.25									T.	.35																	0.75
Bisbee	do				.10										.51											T.						0.61
Bonita	Mimbres			.06	.28										.42											.08						0.84
Bowie	Gila				.37	.06									.65												.10					1.18
Buckeye	do				.30	.20								1.21	.50												.16					2.43
Camp Verde	Verde																															
Canille	San Pedro			T.	.20									T.	.47												T.					0.67
Casa Grande	Gila				.53									.01	.45												.14					1.13
Cave Creek	Verde				.42	.37								.30	1.20	.40											.24					2.93
Chin Lee	San Juan			T.											.38	.28										.30	.02					0.98
Chlarsons Mill	Gila			.20	.86									.35	1.00													.55				2.96
Clifton	do				.19	.12								T.	.54	.11										T.	.56					1.52
Cline	Salt				.53									.45	1.10	.10											.71					2.89
Cochise	Desert													.64														.10				0.74
Columbia	Agua Fria				.45	.22								.52	1.40												.25					2.84
Congress	Hassayampa			.51									.68	1.78	.30	T.																3.27
Courtland	White				.19									.70																		0.89
Dos Cabezos	Desert				.18	.05									1.07																	1.30
Douglas	Sonora			.04	.04									T.	.58											T.						0.66
Dudleyville	Gila			.03	.50										.80	.15											.48					1.96
Fairbank	San Pedro			.05	.04									.26													.05					0.40
Flagstaff	Little Colorado			.01	.11									.75	.13	.02				.03							.23					1.28
Florence	Gila			T.	.30									.40	1.10														T.			1.80
Fort Apache	Salt			.08	.63	T.								.80	.40												.45					2.36
Fort Huachuca	San Pedro				.80										.17												.05					1.02
Fort Mohave	Colorado																															
Gilabend	Gila			.02										.02	.19												.22					0.45
Globe	Salt				.85									.15	.88	.01											.45					2.34
Grand Canyon	Colorado																															
Greer	Little Colorado			.10	.52											.22	.02										.30					1.76
Hereford	Gila													.58													.06					0.64
Holbrook	Little Colorado				.30										.43	T.											.60					1.33
Intake	Salt				.65									.85					.10								.10					1.70
Jerome	Verde			.06	.33	.11								.73	.82	.15				.16							.32					2.68
Keams Canyon	Little Colorado			T.	.12									T.	.57	.04			.02								.63					1.73
Kingman	Colorado			.42	.26								.16	.94	.43				.15								.12					2.48
Lewis Springs	San Pedro			.04	.06									.28													.08					0.46
Maricopa	Gila													.60	.15												.25					1.00
Mesa	Salt			.29	.64									1.02	.14												.50					2.59
Mohawk Summit	Gila																								.15							0.15
Naco	San Pedro														.32																	0.32
Natural Bridge	Verde				.75	.33								.60	1.25	.62	.02										.29					3.86
Nogales	Santa Cruz																															
Oracle	San Pedro			T.	.76								.25	.77	.21												.20					2.19
Osborn	do				.05	.06								T.	.70																	0.81
Paradise	Desert				T.	.20									.70												T.					0.90
Parker	Colorado			.06	.08									1.80	1.95																	4.49
Payson	Verde			T.	.76	.25								.61	.68	.20	T.										.39					2.69
Phoenix	Salt			.01	.32									.96	.24	T.											.08					1.61
Pinal Ranch	Gila			.11	.69									1.17	.76	.12												.38				3.23
Pinto	Little Colorado			T.	.23										.33	.23											.20					0.99
Prescott	Hassayampa			.10	.50	.10								.50	.40	.13											.50					2.23
Quartzsite	Colorado				.85									1.06	1.20	.20																3.31
Redrock	Santa Cruz			.04	.33										.42	1.52											.03					2.34
Roosevelt	Salt			.03	.68	.01							.90	.80	.15					.07							.49					3.13
Sacaton	Gila				.75	.11								.20	1.20	.10																2.36
St. Johns	Little Colorado			T.		.85									.20					T.							.30					1.35
St. Michaels	do				T.										.40	.10	T.										.34					0.84
Salome	Colorado				.31									.45	2.10												.11					2.97
San Carlos	Gila			.03	.67									.20	.56												.36					1.82
San Simon	do				.06									.14	.62												.05					0.87
Seligman	Verde				.35									.66	.04	T.			.12													1.17
Sentinel	Gila													.12	.50																	0.62
Show Low	Little Colorado																															
Silverbell	Santa Cruz				.35									.15	1.90	.43											.10					2.93
Snowflake	Little Colorado				.27	.03								.06	.30												.20					0.86
Supai	Colorado																															
Tempe	Salt				.71	.19								.48	.70	.03											.31					2.42
Thatcher	Gila			.02	.05	.33									.75												.06					1.21
Tombstone	San Pedro				.09									.43																		0.52
Truxton	Colorado				.47								1.60						.34							.18							2.59
Tuba	Little Colorado				T.	.08									.25	.78				.05								.07					1.23
Tucson	Santa Cruz			T.	.06	.64								.04	.52	.06		T.										T.					1.32
Vail	do				.02	.55								.26	.60	.04												T.					1.47
Walnut Grove	Hassayampa			.40	.32									.08	.65	.35											.60					2.42
Wickenburg	do				.55									.05	1.30	.15																	2.05
Willcox	Desert			.67											.45																		1.12

TABLE 2.—*Daily precipitation for November, 1910. District No. 9*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Arizona—Continued.																															
Williams	Colorado			.12	.15									.14	.50											.10						1.01
Winslow	Little Colorado				.20									.35		T.											.31					0.86
Yarnell	Hassayampa				.60										1.30	1.20	.36										.05					3.51
Yuma	Colorado			.04										1.20	.34																	1.58
Nevada.																															
Caliente	Colorado												•	.08	.02																	0.10
Las Vegas	....do																														
Logan	....do			T.	.04									.59	.24	.07			T.													0.94

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 9, Colorado Valley.*

Date.	Wyoming.				Colorado.										Utah.										New Mexico.			
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Fort Duchesne.		Hite.		Moab.		St. George (Experiment station).		Fort Bayard.		Fort Wingate.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	.....	.....	58	16	63	30	65	30	49	14	58	20	.....	.....	64	40	65	25	63	38	69	30	79	33	74	40	65	28
2	.....	.....	61	18	64	30	66	36	57	12	62	19	.....	.....	62	41	61	25	61	37	68	31	77	33	75	41	62	25
3	.....	.....	59	20	66	29	66	33	60	12	64	24	.....	.....	61	40	64	26	55	40	67	31	67	37	70	40	60	22
4	.....	.....	61	13	52	40	60	44	46	25	55	33	.....	.....	63	45	57	28	70	45	67	40	64	45	65	40	61	21
5	.....	.....	57	9	57	34	60	35	49	22	61	15	.....	.....	61	40	54	19	59	44	62	33	69	32	63	35	59	28
6	.....	.....	56	13	60	27	60	35	52	15	49	15	.....	.....	66	43	57	18	56	35	63	27	70	27	70	36	68	28
7	.....	.....	61	19	61	25	60	30	60	24	62	18	.....	.....	69	46	57	18	68	36	63	27	71	27	68	37	65	28
8	.....	.....	58	17	64	24	59	30	61	10	58	20	.....	.....	62	40	59	19	70	35	65	26	71	28	70	38	67	28
9	.....	.....	59	18	66	28	66	30	57	17	51	25	.....	.....	63	45	59	30	72	46	67	27	73	28	72	37	63	26
10	.....	.....	62	16	62	29	65	32	60	15	64	22	.....	.....	65	41	61	26	72	39	66	31	73	32	69	32	67	21
11	.....	.....	60	18	65	31	65	40	58	19	65	22	.....	.....	66	46	55	24	69	38	67	31	71	34	70	36	65	24
12	.....	.....	59	13	61	31	64	35	59	20	64	25	.....	.....	61	40	58	28	71	38	67	35	76	43	71	42	69	22
13	.....	.....	57	16	58	34	64	33	56	21	63	40	.....	.....	60	38	60	33	70	40	66	35	54	47	62	37	70	30
14	.....	.....	61	19	44	32	54	42	40	24	54	25	.....	.....	61	30	65	35	62	48	65	38	54	47	60	31	48	20
15	.....	.....	62	18	36	31	42	38	50	20	42	29	.....	.....	57	31	57	39	58	44	49	38	60	49	58	30	45	28
16	.....	.....	62	19	41	28	52	36	60	17	45	28	.....	.....	45	31	52	27	56	45	57	40	65	46	58	32	46	31
17	.....	.....	51	18	45	26	49	39	47	30	42	27	.....	.....	48	30	50	22	60	38	56	35	64	38	61	34	49	28
18	.....	.....	44	15	46	24	57	36	53	16	49	32	.....	.....	47	30	47	19	63	39	58	30	61	37	59	32	53	28
19	.....	.....	35	14	50	31	48	34	53	19	44	24	.....	.....	43	29	48	28	59	41	53	40	59	38	60	30	47	33
20	.....	.....	42	10	45	20	46	29	50	20	42	12	.....	.....	45	26	44	15	63	32	54	26	59	28	61	27	53	18
21	.....	.....	46	19	49	21	50	29	40	22	50	18	.....	.....	43	28	42	16	62	32	52	26	60	28	69	31	55	19
22	.....	.....	41	22	55	25	50	31	49	19	43	32	.....	.....	40	29	55	24	59	36	56	30	63	31	70	34	59	26
23	.....	.....	39	24	55	26	55	35	54	16	53	30	.....	.....	41	27	61	27	66	37	58	32	65	33	76	35	61	35
24	.....	.....	52	27	59	30	58	33	50	17	60	38	.....	.....	45	28	58	28	70	43	63	32	64	33	75	36	69	25
25	.....	.....	62	37	62	28	61	31	60	15	65	34	.....	.....	48	29	61	23	69	36	70	35	70	29	69	35	68	29
26	.....	.....	47	21	43	26	60	38	45	15	55	27	.....	.....	45	26	47	29	58	40	59	34	56	42	70	33	55	28
27	.....	.....	39	2	38	20	45	30	43	16	39	25	.....	.....	47	29	40	21	53	32	59	26	56	32	67	31	55	23
28	.....	.....	51	21	44	18	47	28	49	12	47	28	.....	.....	48	26	46	19	50	30	52	24	56	25	69	33	55	22
29	.....	.....	52	32	49	22	51	26	50	10	55	25	.....	.....	46	29	50	20	55	31	54	23	61	25	67	32	64	25
30	.....	.....	54	15	50	22	52	30	50	10	53	20	.....	.....	42	26	50	20	56	30	54	23	61	25	66	33	62	22
Mns.	.....	.....	53.6	18.0	53.7	27.4	56.6	33.6	52.2	17.5	53.8	25.1	.....	.....	53.8	34.3	54.7	24.4	62.5	38.2	60.9	31.2	65.0	34.4	67.1	34.7	59.5	25.6

Date.	Arizona.																							
	Bisbee.		Flagstaff.		Fort Apache.		Grand Canyon.		Parker.		Phoenix.		Prescott.		St. Michaels.		San Carlos.		Tucson.		Yuma.		Logan, Nev.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	74	46	61	24	78	29	.....	.....	96	55	85	50	72	30	69	28	85	39	86	41	90	51	85	46
2	76	48	68	20	76	33	.....	.....	94	55	88	52	74	29	70	24	86	35	92	41	94	50	86	43
3	65	52	60	31	74	34	.....	.....	88	65	71	52	68	42	67	28	73	38	73	50	81	60	77	40
4	62	51	50	30	68	30	.....	.....	80	53	67	50	54	42	54	37	63	47	64	46	78	56	70	48
5	63	40	54	24	56	30	.....	.....	84	33	73	46	62	32	60	34	80	37	71	43	78	51	74	37
6	72	41	58	22	57	30	.....	.....	89	35	80	48	65	30	63	25	75	39	79	42	84	51	76	35
7	70	43	62	23	58	30	.....	.....	87	45	81	50	66	30	62	23	75	58	81	43	85	49	77	33
8	69	45	62	21	65	30	.....	.....	88	43	79	50	68	28	62	20	79	37	80	43	86	45	75	33
9	68	39	64	22	67	30	.....	.....	85	42	79	48	65	27	64	26	78	37	78	41	84	48	77	38
10	70	43	65	24	71	29	.....	.....	86	37	81	48	71	31	68	24	77	36	85	39	84	49	79	38
11	75	43	61	25	73	29	.....	.....	85	43	80	50	70	30	69	24	80	33	85	41	82	45	77	38
12	64	46	55	30	63	32	.....	.....	80	53	72	53	70	29	69	25	78	37	74	47	74	51	78	44
13	60	46	42	33	64	37	.....	.....	75	45	65	52	68	28	55	37	64	46	70	55	65	52	73	54
14	56	40	40	32	62	38	.....	.....	58	42	55	50	45	37	55	30	60	46	58	48	63	52	62	51
15	54	35	40	32	56	32	.....	.....	70	42	64	52	48	38	55	30	63	45	65	47	69	52	62	51
16	55	36	47	30	58	27	.....	.....	75	40	70	48	50	31	49	34	65	46	65	42	69	50	70	50
17	59	38	51	25	57	28	.....	.....	78	40	71	46	56	30	50	27	69	45	69	40	75	46	70	42
18	60	38	48	24	55	31	.....	.....	76	35	72	48	58	30	56	26	69	35	69	39	76	48	67	40
19	58	41	49	30	54	24	.....	.....	76	31	68	48	56	28	51	22	67	35	70	40	71	45	63	39
20	58	36	47	16	58	21	.....	.....	76	32	70	44	55	23	50	19	68	34	64	38	72	48	64	33
21	63	37	60	18	58	25	.....	.....	78	32	74	41	61	25	59	19	69	31	78	37	75	49	66	33
22	63	37	62	26	59	27	.....	.....	79	40	74	44	67	26	62	22	69	30	75	35	77	46	69	33
23	70	39	60	26	66	28	.....	.....	79	40	74	43	68	29	63	27	72	31	77	37	78	46	68	36
24	71	42	62	25	68	26	.....	.....	82	35	79	45	69	28	65	27	72	30	84	40	80	46	71	34
25	67	45	56	28	74	34	.....	.....	79	38	78	45	68	30	65	38	70	30	82	43	78	42	73	37
26	58	47	40	28	59	30	.....	.....	68	31	66	48	64	27	50	26	65	36	65	40	67	45	61	33
27	59	35	49	19	53	25	.....	.....	69	39	64	39	54	23	50	19	64	32	68	36	74	37	61	33
28	67	37	59	20	57	23	.....	.....	75	30	71	39	61	23	55	22	65	30	70	34	71	38	65	32
29	68	42	60	19	65	25	.....	.....	74	28	73	41	66	23	56	19	70	30	78	34	73	41	67	32
30	71	42	55	20	66	27	.....	.....	76	35	81	41	67	22	55	18	69	28	84	36	76	51	65	28
Means	64.8	41.7	54.9	24.9	63.2	29.1	.....	.....	79.5	40.1	73.5	47.0	62.9	29.4	59.3	26.0	71.6	37.1	74.6	41.3	77.0	48.0	70.9	38.8

Climatological Data for November, 1910.

DISTRICT NO. 10, GREAT BASIN.

ALFRED H. THIESSEN, District Editor.

GENERAL CLIMATOLOGICAL CONDITIONS.

During November stormy days were infrequent, and generally favorable weather was reported. In most localities of the district the weather was unusually warm, and very dry except in the Oregon area. The average temperature in the Utah area has not been exceeded in any November during the period of observations, and was about 9° higher than the very low averages in November of 1895 and 1896. In the Nevada area the average temperature for the month was higher than any previous average for November, except in the years 1894 and 1901. The precipitation averaged unusually low in both the Utah and Nevada areas, being about one-half the normal amount; larger amounts were recorded in the remaining portions of the district.

TEMPERATURE.

The mean temperature for the month averaged 41.5°, being about 3.5° above normal. The lowest monthly means occurred in the higher portions of Utah and Nevada, and in the Wyoming and Oregon areas, and the highest in the sheltered valleys of the Utah area and in southern Nevada.

Very nearly every station in the district reported temperatures above normal. The greatest plus departures occurred in the protected valleys of the Utah area, while the greatest minus departures, which were not many, occurred at a few exposed stations in the northern portions of the Utah and Nevada areas.

The temperature at the beginning of the month was quite high everywhere, and continued so through the 3d, after which it became somewhat cooler, but for only a few days. The highest temperatures occurred generally from the 10th to the 13th, and temperatures above normal continued until the 25th, from which time to the 27th the coolest weather for the month was experienced, after which it became somewhat warmer.

The highest temperature for the district was 80°, at Jean and Cobra, Nev., on the 2d and 6th, respectively, the next highest being 78° at Fillmore, Utah, on the 2d. While the greatest number of stations recorded their highest temperature on the first few days of the month, there were many stations in Utah where the highest occurred on the 10th, 11th, and 12th.

The lowest temperature was 11° below zero at Christmas Lake, Oreg. Every station in the district reported temperatures below freezing in some portion of the month, while at nine stations zero temperatures and below were reported.

PRECIPITATION.

The precipitation for the district as a whole averaged 0.84 inch, which is about 0.24 inch below normal. The monthly amounts varied widely in different localities. They were greatest in the Utah area along the western slope of the Wasatch, in the drainage basins of the Truckee, Carson, and Walker rivers of Nevada, and in the Oregon area; while very small amounts fell in the interior of Nevada and in the extreme western portion of Utah. Amounts above normal fell in the extreme northeastern and northwestern portions of the district, while amounts below normal fell generally throughout Utah and Nevada. Only a few stations reported traces or no precipitation whatever.

The greatest monthly amount was 6.74 inches at Donner Ice Camp, Cal., while an almost equally large amount fell at Valley Falls, Oreg. The greatest 24-hour amount was 1.76 inches at Donner Ice Camp, Cal., on the 25th.

A few showers fell at widely separated stations in Utah during the first few days of the month. On the 7th good amounts fell in portions of the Oregon area, and rain became more general over the district on the 8th and 9th. Most of the precipitation for the month fell in the period from the 13th to the 26th, but in the Wyoming and Oregon areas it continued until the end of the month. As a rule the largest amounts fell on or about the 23d.

In the Utah area the only snow which fell in the agricultural districts was on the 26th, when from a trace to an inch was recorded. In the mountain stations the amounts were greater, ranging up to a foot at Strawberry Tunnel, with estimates of much greater amounts in all the higher mountains. The largest amount reported was 21 inches at Glen Alpine Springs, Cal.

Sunshine during the month was abundant; at Salt Lake City, Utah, 56 per cent of the possible amount was recorded, whereas during November, 1909, only 36 per cent was recorded.

There were on the average 4 rainy, 12 clear, 8 partly cloudy, and 10 cloudy days.

The highest wind was 46 miles an hour from the southwest on the 25th at Modena, Utah.

NOTE.

Work on Strawberry Tunnel was pursued with three shifts, no time being lost. The heading was dry and the material encountered varied considerably, but hard blue limestone predominated. Five hundred linear feet of the tunnel was excavated during the month. The work of concreting the tunnel was prosecuted with one shift, and 563 feet was lined during the month. The project as a whole is 44 per cent completed, and the tunnel 38 per cent.

TABLE 1.—*Climatological data for November, 1910. District No. 10, Great Basin.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Wyoming.																				
Border	Uinta	6,085	7	33.4	+ 3.7	62	11	0	27	43	1.01	+ 0.03	0.52	.....	4	11	9	10	w.	S. W. Condron.
Cokeville	do	6,204	0	31.4	.....	64	12	2	27	43	1.10	.....	0.39	.....	7	20	5	5	w.	E. J. Tuckett.
Evanston	do	6,860	13	36.8	+ 4.5	61	10	2	27	40	0.30	− 0.56	0.30	T.	1	19	6	5	sw.	Frank Tucker.
Idaho.																				
Geneva	Bear Lake		3	.....	.....	.....	.....	.....	.....	.....	1.73	.....	1.40	.....	3	21	6	3	.....	F. W. Boehme.
Grace	Bannock	5,400	4	37.9	.....	67	8	8	27	46	0.95	.....	0.44	2.5	7	13	4	13	n.	Cyril B. Dickson.
Oxford	do	4,750		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Edwin Smith.
Paris	Bear Lake	5,946	16	36.0	+ 2.5	69	10	− 2	26	47	1.17	+ 0.04	0.95	4.0	2	13	15	2	nw.	John Norton.
Stone	Oneida	4,520		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thos. W. Roe.
Weston	do	4,460	13	38.6	+ 1.8	65	11	3	27	40	0.93	− 0.43	0.50	3.0	6	9	6	15	sw.	Wm. Chatterton.
Utah.																				
Alpine	Utah	4,900	13	.....	.....	.....	.....	.....	.....	.....	1.36	− 0.05	1.11	0.0	3	10	10	10	.....	George Stevens.
Annabella	Sevier	5,250	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Fairbanks.
Beaver	Beaver	6,000	7	44.4	.....	65	2†	12	27	36	1.10	.....	0.40	2.5	6	14	10	6	sw.	James Connell.
Black Rock	Millard	4,872	10	42.6	.....	70	2	0	27	48	0.80	+ 0.09	0.40	3.0	2	14	12	4	.....	W. D. Livingston.
Blacksmiths Fork	Cache		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Forest Supervisor.
Card Canyon	do		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Castle Rock	Summit	6,244	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	David Moore.
Cedar City	Iron	5,750	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Parley Dalley.
Corinne	Boxelder	4,240	40	.....	.....	.....	.....	.....	.....	.....	0.30	− 0.67	0.30	T.	1	7	8	15	nw.	A. C. Murphy.
Deseret	Millard	4,541	16	42.8	+ 5.9	68	8	14	27	46	0.33	− 0.11	0.25	2.0	3	13	7	10	n.	S. W. Western.
Enterprise	Washington	4,270	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Day.
Farmington	Davis	4,267	10	43.0	+ 2.7	63	2†	17	27	34	1.16	− 0.35	0.56	0.5	5	19	5	6	nw.	Charles Boylin.
Fillmore	Millard	5,100	20	47.3	+ 6.2	78	2	15	27	46	0.87	− 0.04	0.40	.....	4	.....	.....	.....	.....	J. J. Starley.
Friese Summit	Wasatch			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Victor A. Friese.
Frisco	Beaver	7,318	16	43.9	+ 4.2	66	7	13	27	31	0.50	+ 0.02	0.15	.....	4	.....	.....	.....	.....	E. R. Smyth.
Garland	Boxelder		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Harry B. Shaw.
Garrison	Millard		7	44.0	.....	71	7	12	27	45	T.	.....	T.	0.0	0	15	9	6	s.	E. M. Smith.
Government Creek	Tooele	5,277	10	44.4	+ 6.2	67	10	15	27	31	0.62	− 0.57	0.60	T.	3	10	13	7	s.	Walter James.
Grantsville	do		1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Allen J. Frazer.
Grouse Creek	Boxelder			.....	.....	.....	.....	.....	.....	.....	0.68	.....	0.30	2.0	4	15	9	6	sw.	Philip Paskett.
Heber	Wasatch		17	40.0	+ 4.5	68	11†	10	27	48	0.60	− 0.70	0.40	.....	3	12	8	10	s.	John Crook.
Henefer	Summit	5,301	11	40.3	+ 5.6	69	10	9	27	53	0.66	− 0.83	0.32	.....	6	9	9	12	nw.	Wm. Brewer.
Ibapah (near)	Tooele	7,500	5	30.4[d]	.....	59	3†	5	20	39	0.45	.....	0.35	3.0	3	13[d]	8[d]	5[d]	e.	J. S. Lawton.
Ibex	Millard			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John J. Watson.
International	Tooele	5,370	1	45.8	.....	70	11	20	27	31	1.19	.....	0.70	1.0	4	14	12	4	se.	I. S. and R. Co.
Iosepa	do			46.4	.....	79	12	16	27	38	0.55	.....	0.45	T.	2	6	1	23	s.	James Mackie.
Kanosh	Millard	5,250	2	.....	.....	.....	.....	.....	.....	.....	0.73	.....	0.41	.....	3	.....	.....	.....	.....	Geo. Crane.
Kelton	Boxelder	4,230	32	37.8	+ 3.5	65	10	10	27	47	0.35	+ 0.25	0.55	T.	1	6	11	13	ne.	F. W. Klock.
Levan	Juab	5,010	20	41.7	+ 5.0	66	11	10	27	36	0.78	− 0.14	0.43	2.8	5	15	4	11	sw.	Wm. Brown.
Logan	Cache	4,507	19	40.0	+ 2.2	66	11	6	26	35	0.87	− 0.27	0.41	0.0	5	.....	.....	.....	.....	Utah Exp. Station.
Lucin	Boxelder	4,504	6	40.1	.....	68	1	7	29	54	0.05	.....	0.05	0.0	1	12	6	12	.....	C. J. Burke.
Manti	Sanpete	5,575	16	37.9[a]	+ 0.5	58	23	10	26	30	0.89	− 0.02	0.39	0.5	5	12[a]	2[a]	15[a]	.....	J. M. Anderson.
Marion	Summit		6	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.41	3.0	5	3	9	18	n.	Jas. Woolstenhulme.
Marysvale	Piute	6,280	11	42.0	+ 5.6	72	3	11	27	48	0.85	+ 0.17	0.50	0.2	5	9	7	14	n.	John W. Henry.
Meadowville	Rich	6,200	11	37.2	+ 3.9	59	1†	10	27	35	0.75	− 0.36	0.70	0.5	2	12	5	13	w.	J. S. Moffat.
Milford	Beaver	4,962	6	43.2	.....	73	2	4	27	47	0.65	.....	0.33	2.0	3	12	7	11	sw.	J. C. Manuel.
Millville	Cache	4,848	15	.....	.....	.....	.....	.....	.....	.....	0.97	− 0.50	0.34	.....	6	5	21	4	s.	Fred Yeates.
Minersville	Beaver	5,070	13	.....	.....	.....	.....	.....	.....	.....	0.72	.....	0.21	1.5	4	.....	.....	.....	.....	Geo. Roberts, sr.
Modena	Iron	5,479	10	42.0	+ 3.0	68	2	19	27	43	1.01	+ 0.41	0.45	0.1	6	9	10	11	w.	U.S. Weather Bureau.
Morgan	Morgan	4,280	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Visick.
Moroni	Sanpete	5,519	2	42.6[a]	.....	70	12	13	27	40	0.96	.....	0.67	1.0	4	18	3	9	sw.	B. F. Eliason.
Mount Nebo	Utah	4,650	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	D. C. Walkey.
Nephi (near)	Juab	6,059	7	.....	.....	.....	.....	.....	.....	.....	0.58	.....	0.43	.....	3	.....	.....	.....	.....	S. Boswell.
Oak City	Millard	4,900	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Peter Nielson.
Ogden	Weber	4,310	9	44.6[b]	.....	67	11	26	4†	31	0.19	.....	0.08	0.3	3	15[b]	5[b]	8[b]	nw.	Enoch Farr.
Panguitch Lake	Garfield	9,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jas. E. Prince.
Park City	Summit	7,800	13	34.8	+ 0.1	57	4†	8	27	32	1.01	− 0.89	0.41	.....	8	13	4	13	.....	Irvin Evans.
Parowan	Iron	5,970	19	45.0	+ 6.3	70	3†	14	29	48	1.78	+ 1.16	0.80	.....	4	22	0	8	.....	S. M. Matheson.
Payson	Utah	4,637		.....	.....	.....	.....	.....	.....	.....	1.21	.....	0.75	3.0	5	7	18	5	sw.	D. L. Coombs.
Pinto	Washington	5,907	13	41.1[a]	+ 5.5	67	1†	14	5†	51	1.48	+ 0.37	0.53	.....	4	10[d]	3[d]	7[d]	s.	J. H. Harrison.
Promontory	Boxelder	4,913	39	.....	.....	.....	.....	.....	.....	.....	0.40	− 0.12	0.20	4.0	3	.....	.....	.....	.....	F. C. Houghton.
Provo	Utah	4,532	18	44.2	+ 5.2	72	2	15	27	52	1.15	+ 0.08	0.95	0.0	2	7	18	5	n.	James A. Oliver.
Randolph	Rich	6,442	7	.....	.....	.....	.....	.....	.....	.....	0.47	.....	0.34	.....	3	24	0	6	sw.	William Rex.
Richfield	Sevier	5,350	20	40.5	+ 3.2	70	8†	12	18	48	0.37	+ 0.07	0.20	2.0	2	19	2	9	.....	Joseph J. Jensen.
Saltair	Salt Lake	4,220	7	44.8	.....	63	25	23	27	32	0.89	.....	0.57	0.0	5	.....	.....	.....	.....	E. J. Bench.
Salt Lake City	do	4,360	37	46.6	+ 6.2	70	2	23	27	29	0.99	− 0.43	0.78	0.1	7	12	10	8	nw.	U. S. Weather Bureau.
Scipio	Millard	5,260	15	43.2	+ 6.5	70	5	9	8	58	1.04	− 0.11	0.67	T.	4	13	6	11	sw.	Thos. Memmott.
Sevier Mine	Sevier			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Max Krotki.
Silver City	Juab	6,127		.....	.....	.....	.....	.....	.....	.....	0.63	.....	0.34	.....	4	16	7	7	sw.	J. L. Stark.
Spanish Fork Canyon	Utah	4,585	1	46.2	.....	69	3	19	27	32	0.71	.....	0.62	.....	4	11	13	6	.....	U. S. Reclamation Service.
Strawberry	do		4	37.2	.....	62	10	5	27	33	1.20	.....	0.60	12.0	4	16	6	8	.....	Do.
Thistle	do	5,075	18	39.2[a]	+ 2.1	66	3	13	5	48	0.70	− 0.32	0.50	0.0	2	.....	.....	.....	w.	John Thorgeirson.
Tooele	Tooele	4,900	14	38.6	− 1.2	62	11	17	27	32	0.85	− 0.68	0.52	0.0	5	3	15	12	n.	E. A. Bonelli.
Utah Lake	Utah	4,500	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Knight.
Woodruff	Rich	6,500	12	34.1	+ 3.5	65	9†	− 3	27	57	.....	.....	.....	.....	.....	12	12	6	.....	J. Sidney Pusey.
Oregon.																				
Burns	Harney	4,157	20	36.8	+ 2.4	64	1	− 2	15	48	3.33	+ 1.74	0.90	17.0	8	9	2	19	.....	J. C. Welcome, jr.
Christmas Lake	Lake	4,320	2	34.6	.....	68	1	−11	26	53	2.93	.....	0.49	9.5	13	5	3	22	sw.	John C. Green.
Paisley	do	4,500	6	38.8	.....	66	2	7	26	32	2.83	.....	1.00	15.0	7	.....	.....	.....	sw.	E. C. Woodward.
"P" Ranch	Harney	4,300		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. P. Jefferson.
Silver Lake	Lake	4,700	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Holder.
California.																				
Al Tahoe	Eldorado	6,235	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Sprague.
Glen Alpine Springs	do	6,850	.....	37.8	.....	60	2†	9	26	37	4.75	.....	1.00	21.0	6	6	0	24	s.	R. W. Porteous.
Tahoe	Placer	.....	.....	39.2	.....	65	2†	8	27	34	3.05	.....	1.00	15.0	6	10	11	9	w.	Robert M. Watson.
Truckee	Nevada	5,819	39	45.0	+ 8.5	68	10	22	14	42	0.30	− 2.02	0.20	3.0	2	11	0	19	sw.	Southern Pacific Co.
Nevada.																				
Aurora	Esmeralda			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. I. Cain.
Austin	Lander	6,594	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James L. Pelton.
Battle Mountain	do	4,843	39	42.0	+ 3.3	70	25	12	28	52	0.36	− 0.14	0.21	0.0	2	9	12	9	nw.	Southern Pacific Co.
Beowawe	Eureka	4,905	39	41.6	+ 4.7	72	2	10	16	44	0.50	− 0.06	0.40	0.0	2	15	11	4	sw.	Do.
Carlin	Elko	5,232	39	38.8	+ 5.3	75	1†	4	15	59	0.03	− 0.30	0.02	0.1	2	24	0	6	.....	Do.
Carson Dam	Churchill	4,032	3	44.4	.....	74	2	17	26	41	0.26	.....	0.26	0.0	1	11	9	10	w.	U. S. Reclamation Service.
Cherry Creek	White Pine	6,450	2	42.6	.....	67	2†	12	27	38	0.30	.....	0.22	T.	5	8	16	6	w.	J. H. Leishman.
Clover Valley	Elko	6,000	10	42.1	.....	70	2	10	27	46	1.15	.....	0.96	0.0	3	12	9	9	.....	I. F. Wiseman.
Cobre	do		1	38.1	+ 3.7	80[a]	6	− 1	27	65	.....	.....	.....	.....	.....	28	1	1	sw.	Southern Pacific Co.
Columbia	Esmeralda	5,750	3	43.8	.....	68	2	19	27	36	0.71	.....	0.49	2.0	4	17	7	6	se.	A. Booth.

TABLE 1.—*Climatological data for November, 1910. District No. 10*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
***Nevada*—Continued.**																				
Dutton	Elko	5,100	2	35.0	.....	69	1	0	24	58	0.38	.....	0.37	T.	3	8	8	14	w.	Golconda Cattle Co.
Elko	do	5,342	39	37.8	+ 4.0	68	2	4	17	52	0.08	− 0.58	0.04	0.2	3	10	8	12	ne.	Southern Pacific Co.
Ely	White Pine	6,421	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Hunting.
Eureka	Eureka	6,500	7	42.1	+ 2.5	69	2†	7	26	40	0.58	− 0.10	0.50	8.5	2	7	6	17	s.	Clay Simms.
Fallon	Churchill	3,965	5	43.4	+ 3.7	75	2	13	26	46	0.02	− 0.16	0.02	0.0	1	20	5	5	w.	U. S. Experiment Farm.
Fernley	Lion	4,200	2	48.4[a]	+ 8.9	77	2	24	16	47[a]	0.54	+ 0.17	0.54	0.0	1	.....	.....	.....	.....	Mrs. A. J. Rankin.
Gardnerville	Douglas	4,830	10	44.9	+ 2.2	70	1†	19	26†	42	0.12	− 1.50	0.06	0.0	2	8	14	8	e.	Wm. Dangberg.
Geyser	Lincoln	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. J. F. Wambolt.
Glenbrook	Douglas	.....	1	46.9	.....	67	22	28	6†	37	1.35	.....	0.50	2.0	5	14	14	2	sw.	C. C. Henningsen.
Golconda	Humboldt	4,697	31	38.4	− 2.1	67	3	18	24	42	0.25	− 0.12	0.25	0.0	1	20	1	9	w.	Southern Pacific Co.
Halleck	Elko	5,631	17	39.2	+ 0.6	68	2	6	4†	53	0.02	− 0.50	0.02	0.2	1	18	6	6	.....	Do.
Jean	Clark	2,074	2	56.3[a]	.....	80	2	28	27	39[a]	0.90	.....	0.50	0.0	2	.....	.....	.....	sw.	Salt Lake Route.
Leetville	Churchill	4,020	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Lewers Ranch	Washoe	5,500	22	45.6	+ 2.0	71	1	21	26	41	1.58	− 1.72	0.95	0.0	4	12	13	5	.....	Ross Lewers.
Lovelock	Humboldt	3,977	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Case.
McAfees Ranch	Esmeralda	4,835	6	.....	.....	.....	.....	12	11†	.....	0.00	.....	0.00	0.0	0	8	9	13	s.	C. H. Rodenkirch.
Millett	Nye	.....	2	40.4	.....	69	1†	7	27	48	T.	.....	T.	0.0	0	17	5	8	s.	Fred J. Jones.
Mina	Esmeralda	4,000	3	45.0	.....	72	2	20	19†	46	T.	.....	T.	0.0	0	10	4	16	w.	Southern Pacific Co.
Palmetto	do	6,780	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. J. Akin.
Potts	Nye	6,990	17	37.4	+ 2.6	63	3	6	26	43	0.05	− 0.42	0.05	0.0	1	6	6	18	n.	Miss Mamie Potts.
Quinn River Ranch	Humboldt	4,850	8	40.6[a]	.....	78	1	8	4	56[a]	1.09	.....	0.35	0.0	6	.....	.....	.....	w.	F. M. Payne.
Reno	Washoe	4,532	39	45.4	+ 4.4	72	2	23	26	38	0.54	− 0.55	0.48	T.	3	8	14	8	w.	U. S. Weather Bureau.
Soda Lake	Churchill	4,534	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Tecoma	Elko	4,812	32	32.6	− 1.4	64	2	− 8	28	54	0.10	− 0.32	0.10	T.	1	7	9	14	s.	Southern Pacific Co.
Tonopah	Nye	6,090	3	44.6	.....	65	2	21	26	23	0.36	.....	0.34	T.	3	10	14	6	se.	U. S. Weather Bureau.
Wabuska	Lyon	4,347	7	41.0	.....	68	22	11	28	50	0.40	.....	0.40	0.0	1	9	0	21	sw.	Vic Bernard.
Wells	Elko	5,631	38	.....	.....	.....	.....	.....	.....	.....	0.20	− 0.48	0.20	0.2	1	13	14	3	.....	Southern Pacific Co.
Winnemucca	Humboldt	4,432	31	42.4	+ 4.9	71	2	15	5	45	0.81	+ 0.07	0.48	0.2	6	9	3	18	sw.	U. S. Weather Bureau.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 10, Great Basin.*

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Wyoming.																																
Border	Bear																	T.		T.		T.		.52	.33		.09	.07	T.			1.01
Cokeville	do									.14													.11	.39	.30		.07		.02	.07		1.10
Evanston	do																			T.			T.	.30								0.30
Idaho.																																
Geneva	Bear																							1.40			.02		.31			1.73
Grace	do								.02								T.	.07	.20			.07	T.	.44		.13	.02	T.				0.95
Oxford	do																															
Paris[‖]	do																								.95		.22					1.17
Stone	Deep Creek																															
Weston	Bear																		.09	.02		.08		.50	.02		.22					0.93
Utah.																																
Alpine	Great Salt Lake																			1.11		.10	.15									1.36
Annabella	Sevier Lake																															
Beaver	do				.03									T.	.09	.16			.12	.30							.40					1.10
Black Rock	do																			.40							.40					0.80
Blacksmiths Fork	Great Salt Lake																															
Card Canyon	do																															
Castle Rock	do																															
Cedar City	Desert																															
Corinne	Great Salt Lake																		.30							T.		T.				0.30
Deseret	Sevier Lake																		.25			.03					.05					0.33
Enterprise	Desert																															
Farmington	Great Salt Lake									T.								.50	.20			T.	.10	.15			.15					1.16
Fillmore	Sevier Lake														.02				.05	.40							.40					0.87
Friese Summit	Great Salt Lake																															
Frisco	Desert									.15					.13	.07			.15													0.50
Garland	Great Salt Lake																															
Garrison	Desert													T.					T.								T.					T.
Government Creek	do																		*	.60	T.	T.		.02		T.					0.62
Grantsville	Great Salt Lake																															
Grouse Creek	Desert									T.									.30			.06		.21				.11				0.68
Heber	Great Salt Lake								.05							T.			.40				.15										0.60
Henefer	do									.08									.05	.02			.12	.32	.07		T.					0.66
Ibapah	Desert														T.	T.			T.	.35		.02	T.	T.			.08					0.45
Ibex	do																		.10								.30					0.40
International	Great Salt Lake																		.70				.10	.09		.30						1.19
Iosepa	Desert																		.45					.10		T.						0.55
Kanosh	Sevier Lake														.09					.23							.41					0.73
Kelton	Great Salt Lake																	.55						T.				T.				0.55
Levan	Sevier Lake				.02											T.			.43				.03	.02			.28					0.78
Logan	Great Salt Lake								T.										.41			.10	.03	.08		.25						0.87
Lucin	Desert																	.05														0.05
Manti	Sevier Lake													.03	.07				.39				.04			.36						0.89
Marion	Great Salt Lake									.04						T.			T.	.41			.18	.05	*	T.	.04					0.72
Marysvale	Sevier Lake			.02										T.	.10	.21			T.	.50							.02					0.85
Meadowville	Great Salt Lake																		T.			T.	T.	.70			.05		T.			0.75
Milford	Sevier Lake														.12				.33								.20					0.65
Millville	Great Salt Lake																		.29			T.	.05	.34	.09		.18		.02			0.97
Minersville	Sevier Lake														.21	.17	T.		.19								.15					0.72
Modena	Desert																															
Morgan	Great Salt Lake																															
Moroni	Sevier Lake			T.											.02					.67			T.	.14			.13					0.96
Mt. Nebo	Great Salt Lake																															
Nephi (near)	do																		.43				.08				.07					0.58
Oak City	Sevier Lake																															
Ogden (1)	Great Salt Lake								T.										T.			.08	T.	.08			.03					0.19
Ogden (2)	do																															
Panguitch Lake	Sevier Lake																															
Park City	Great Salt Lake			.03				.20	.41	.03									.08	.24			.01				.01					1.01
Parowan	Desert			.80											.35	.40											.23					1.78
Payson	Great Salt Lake									.02										.75			.05	.14			.25					1.21
Pinto	Desert				T.									.30	.30					.53							.35					1.48
Promontory	Great Salt Lake																		.10						.20			.10				0.40
Provo	do																		*	.95	T.			.20								1.15
Randolph	do								T.														.06	.34	.07	T.						0.47
Richfield	Sevier Lake												T.			.17											.20					0.37
Saltair	Great Salt Lake									.01										.57			.21	.07			.03					0.89
Salt Lake City	do								.01	.01									.70	.08			.10	.08		.01						0.99
Scipio	Desert			T.											T.	.08			T.	.67							.21	.05				1.04
Sevier Mine	Sevier Lake																															
Silver City	Desert																		.14	.34				.14			.01					0.63
Spanish Fork Canyon	Great Salt Lake									.01									*	.62			.08									0.71
Strawberry Valley	do																		T.	.60		T.	.20	.30			.10					1.20
Thistle	do			T.	T.													.50			.20		T.	T.	T.							0.70
Tooele	do									.01									T.	.52		T.	.12	.02			.18		T.			0.85
Utah Lake Pump'g Sta.	do																															
Woodruff	do																															
Oregon.																																
Ana River	Southeast Drainage							T.	.75		T.	.41						.20	.02			.15	.05	.38	.83	.03		.06	T.			2.88
Burns	do							.61										.49		.10	.15	.53		.50			.90	.05				3.33
Burns Mill	do							.12	.70	.20	.10	.10						.40				.12	.10	.45	.40	.30	.01	.70		.33		4.03
Christmas Lake	do							.10	.42	.06		.37							.33	.02		.20	.18	.30	.49			.11	.23	.11		2.93
Diamond "H" Ranch	do																															
Embody	do	T.			T.	.30	.02	1.42	T.	.15	.06							.02	.01	.20	.05		.30	1.00			.60	.50				4.62
Fort Rock	do							.50										.25		.02		.20	.07	.52	.50		.94	.10				3.40
Paisley	do							*	.64			.40										.06		*	1.00	.67		T.					2.83
Plush	do																															
"P" Ranch	do																															
Seneca	do								.12			.48							.50				.28		.67	.10			.99		.30	3.44
Silver Lake	do																															
Valley Falls	do								.29	T.		.28	.23					.13				.11	.50	.60	3.45			.86	.01			6.46
California.																																
Al Tahoe	Truckee																															
Bijou	do								.08			.13	.19	.11					.08							.33						0.92
Boca	do																															
Bodie	East Walker																															
Bridgeport	do																															
Brockway	Truckee																															
Deer Park	do							.62	.15		1.45	.78	.08						.32				.03	1.48	.07	1.76						6.74
Donner Ice Camp	do							.35		*	*	1.10							.25					*	*	1.55						3.25
Fales' Hot Springs	West Walker											T.	.27						.08							.05						0.40
Glen Alpine Springs	Truckee							.85			.90	.60						.50						.90		1.00						4.75
Hobart Mills	do							.20			.56	.47	.04						.19					.20	.02	1.10						2.78
Lundy	East Walker												.54																			0.54

TABLE 2.—*Daily precipitation for November, 1910. District No. 10*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Continued.																																
Markleeville	East Carson											.21	.24						.36							.27						1.08
McKinney	Truckee								.03	.02		.11	.59	.05					.49					.86	T.	1.59						3.74
Shields' Ranch	West Walker												*	.55	T.				T.						T.	T.						0.55
Silver Creek	East Carson											.25	.20						.38							.30						1.13
Tahoe	Truckee								.40				1.00							.25			.60		*	.80						3.05
Tallac	do												.20					30								.65						1.15
Truckee	do																.20	.10														0.30
Woodfords	West Carson								.12			.15	*	.60											*	.40						1.27
Nevada.																																
Aurora	East Walker																															
Austin	Reese																															
Battle Mountain	Humboldt												.15						.21													0.36
Beowawe	do												.10						.40													0.50
Carlin	do																					.02	.01			T.						0.03
Carson Dam	Carson											T.	.26																			0.26
Cherry Creek	Humboldt											T.			.02				.22	.02		.02		.02								0.30
Clover Valley	do								.06										.13			T.	T.	.90					T.			1.15
Cobre	do																															
Columbia	Desert													.49	.10				.09								.03					0.71
Dutton	Humboldt								.01			*	.37						T.													0.38
Elko	do											.02	.04						T.			.02				T.						0.08
Ely	do																															
Eureka	do								T.										.50			T.				.08						0.58
Fallon	Carson											T.	.02						T.							T.						0.02
Fernley	Truckee												.54																			0.54
Gardnerville	Carson											.06							T.						.06							0.12
Geyser	Humboldt																															
Glenbrook	Truckee								.25					.20					.50							*	.40					1.35
Golconda	Humboldt												.25																			0.25
Halleck	do																									.02						0.02
Jean	Desert			.40											.50																	0.90
Leetville	Carson																															
Lewer's Ranch	Truckee								.10				.95	.30										.23								1.58
Lovelock	Humboldt																															
McAfee's Ranch	Desert																															0.00
Millett	Reese																		T.													T.
Mina	Desert																		T.													T.
North Fork	Humboldt								.15					.10					.10			.11	.20			.01						0.67
Palmetto	Desert																															
Paradise Valley	Little Humboldt																															
Potts	Reese																		.05			T.					T.					0.05
Quinn River Ranch	Humboldt											.22	.12						.35				.10	.25	.05	T.						1.09
Reno	Truckee									T.		T.	.48						T.			T.			.04	.02	T.					0.54
Rose Creek	Humboldt											.06	.70						.33			.06	.04		.25							1.44
Smith	West Walker												.17	.35	T.				T.						.06							0.58
Spooner's Ranch	Truckee								.02			.17	.33						.25						.46							1.23
Soda Lake	Carson																															
Sweetwater	East Walker													.25						.20				.15								0.60
Tecoma	Humboldt																		.10													0.10
Tonopah	Desert													.33	.01				.02							T.						0.36
Wabuska	Walker									T.		.40					T.				T.											0.40
Wells	Humboldt																		T.			T.	T.	T.		.20						0.20
Willow Point	Little Humboldt											*	.20																			0.20
Winnemucca	Humboldt								T.			.20	.31						.14			.03	.01	T.		.12						0.81

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 10, Great Basin.*

Date.	Wyoming.				Utah.																											
	Border.		Evanston.		Weston, Idaho.		Corinne.		Deseret.		Government Creek.		Ibapah.		Marysvale.		Meadowville.		Modena.		Ogden.		Parowan.		Provo.		Salt Lake City.		Burns, Oreg.		Elko.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	55	22	55	22	54	24	.....	.....	56	27	56	34	57	22	58	23	56	27	54	31	56	28	56	31	56	32	64	28	64	28
2	58	26	58	26	56	23	.....	.....	58	24	56	36	56	24	58	24	58	24	56	32	58	32	58	32	58	32	66	26	66	24
3	60	19	60	19	58	25	.....	.....	60	22	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
4	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
5	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
6	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
7	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
8	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
9	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
10	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
11	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
12	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
13	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
14	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
15	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
16	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
17	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
18	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
19	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
20	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
21	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
22	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
23	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
24	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
25	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
26	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
27	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
28	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
29	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
30	60	22	60	22	58	25	.....	.....	60	24	58	41	58	25	60	25	60	25	58	34	60	34	60	34	60	34	68	29	68	26
Mns.	47.5	19.2	50.8	22.8	51.6	25.5	.....	.....	58.0	27.6	56.2	32.5	47.1	25.6	58.4	25.5	48.6	25.7	55.1	28.8	54.1	35.0	62.2	27.7	60.5	28.0	55.6	37.6	48.3	25.3	56.0	19.6

Date	Nevada.																															
	Ely.		Eureka.		Fallon.		Jean.		Lovelock.		Millett.		Mina.		Quinn River Ranch.		Reno.		Tecoma.		Tonopah.		Winnemucca.									
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.								
1	.....	.....	65	31	69	27	.....	.....	.....	.....	69	21	68	28	78	23	72	34	64	15	69	46	71	26								
2	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
3	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
4	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
5	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
6	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
7	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
8	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
9	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
10	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
11	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
12	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
13	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
14	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
15	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
16	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
17	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
18	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
19	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
20	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
21	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
22	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
23	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
24	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
25	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
26	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
27	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
28	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
29	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
30	.....	.....	68	34	67	29	.....	.....	.....	.....	68	25	68	26	80	31	72	34	64	15	69	46	71	26								
Mns.	.....	.....	68.3	25.3	56.0	19.6	.....	.....	57.4	23.3	61.3	28.6	57.2[1]	24.1[1]	57.3	33.4	52.8	12.5	52.3	37.0	55.9	38.9										

Climatological Data for November, 1910.

DISTRICT NO. 11, CALIFORNIA.

Prof. ALEXANDER G. McADIE, District Editor.

GENERAL SUMMARY.

November, 1910, was quite unlike November, 1909. That month was the rainiest November known for many years and the coldest since the present method of determining State averages has been in use. The current November was just about normal with respect to temperature and very dry, the rainfall amounting to little more than 60 per cent of the normal. There were a few stations at which rain fell on 10 or more days, but there were many stations at which rain fell on not more than 3 days during the month and some with only a single rainy day. This may be compared with the preceding November, when rain fell on 12 days as a general average for the whole State, and in some portions the number of rainy days exceeded 20. Comparing the present month with past months of the same name, we find that during a period of 62 years there have been for the central portion of the State 51 years in which the rainfall exceeded the amount of the present month and only 9 years when there was less.

While the precipitation was almost too light to be of great good to the varied interests of the State, the rain was well distributed geographically. For agriculture, mining, stock raising, and the general water-supply problems more rain was needed. This need was urgent because the long dry summer had been preceded by a dry spring and a deficient snow supply in the closing months of winter.

There were no special features of importance in the general character of the weather for the month. There were no extremely high temperatures or long-continued warm spells, and, except in the Salton Desert, maximum temperatures rarely exceeded 80°. In the main the winds were from the north and the general circulation of the lower air from the land seaward, or from the Great Basin southwestward over the mountains. There were not, however, any well-marked Foehn effects, the air moving slowly as a rule and without much momentum. The first week illustrates this condition. Had the pressure distribution been a little more marked and the movement of the air over the eastern flank of the Sierra and down on the western slope been a little more pronounced, higher afternoon temperatures might have been recorded.

A disturbance of moderate energy appeared on the north coast on November 9 and caused unsettled weather with cloudiness and southerly winds in the northern and central counties. On the 11th there was a general reversal of the circulation previously described and the establishment of conditions which, as a rule, prevail in January or February. Light rain fell in the central counties extending gradually to the south as far as San Diego, and for a period of about 100 hours showery, unsettled weather prevailed. Snow fell in the Sierra and there was half an inch on the ground on November 11, marking the beginning of the snow cover for the coming winter. On the 13th thunderstorms were reported in the Valley of the Colorado. Another unsettled period occurred on the 17th, followed by a return to normal conditions.

On the morning of November 21 the pressure distribution was favorable for the development of secondary storms and squalls in the northern counties of the State, and elsewhere there is given a description of a remarkable squall that occurred about 5 a. m. of that date. In the vicinity of San Francisco the squall was remarkable because of its suddenness and the existence of otherwise quiet, normal conditions. We are of the opinion that the squall was due to the larger disturbance over Washington and British Columbia on the same morning and which passed eastward through the northern tier of States, being the forerunner of a series of storms that followed the same general track.

A disturbance that was well marked over the Great Basin on November 23–24 caused rain in California, with snow in the mountains, for a period of about 48 hours. The passage of the low eastward was followed by frosts in the Great Valley of California. This same disturbance was followed by the first general cold wave of the season in practically all districts east of the Rocky Mountains and it was a controlling factor in weather conditions east of the Mississippi at the close of the month. While its existence can be noted over the Great Basin on November 24, its early history, so far as California is concerned, is obscure.

There was considerable fog along the coast during the month, especially in the morning hours.

TEMPERATURE.

Comparing the present month with previous years we find the mean temperature to have been nearly normal. The following table gives the means and departures for each November from 1897 to 1910, inclusive:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	°F.	°F.		°F.	°F.
1897	50.8	−1.7	1904	53.4	+0.9
1898	51.6	−0.9	1905	52.8	+0.3
1899	52.1	−0.4	1906	52.6	+0.1
1900	54.7	+2.2	1907	52.7	+0.2
1901	54.9	+2.4	1908	52.9	+0.4
1902	50.8	−1.7	1909	50.7	−1.8
1903	55.2	+2.7	1910	52.8	+0.3

The highest temperature recorded was 103° on the 1st and other dates at Mammoth Tank and the lowest 1° below zero at Alturas on the 26th. The highest mean temperature was 70.5° at Mammoth Tank and the lowest 33.2° at Tamarack.

PRECIPITATION.

The precipitation was less than one-half of that of November, 1909. The following table gives the average and departure from the normal for each November from 1897 to 1910, inclusive:

Year.	Amount.	Departure.	Year.	Amount.	Departure.
	Inches.	*Inches.*		*Inches.*	*Inches.*
1897	1.41	−1.76	1904	1.44	−0.73
1898	0.99	−2.18	1905	2.26	−0.91
1899	3.82	+0.65	1906	1.92	−1.25
1900	5.21	+2.04	1907	0.28	−2.89
1901	2.65	−0.52	1908	1.85	−1.32
1902	3.61	+0.44	1909	4.52	+1.35
1903	5.03	+1.86	1910	1.91	−1.26

The greatest monthly precipitation was at Weitchpec, 18.74 inches, and none occurred at Bagdad and Mojave. The greatest 24-hour rainfall was 4.83 inches at Magalia. There were a number of stations at which over 2 inches fell in 24 hours.

Snowfall.—There were 34 inches of snow during the month at Tamarack, 30 inches at Summit, 21 inches at Cisco, 20 inches at Daunt, and 19 inches at Fordyce Dam. At the close of the month there remained on the ground at Summit 7 inches. The snowfall was comparatively light.

SUNSHINE.

The following table gives the hours of sunshine and percentage of possible:

Stations.	Hours.	Per cent of possible.	Stations.	Hours.	Per cent of possible.
Eureka	81	27	Sacramento	150	50
Fresno	240	73	San Diego	201	64
Los Angeles	203	65	San Francisco	127	42
Mount Tamalpais	132	43	San Jose	204	67
Red Bluff	149	50	San Luis Obispo	165	53

EARTHQUAKES.

Earthquakes were recorded during November as follows:

Alameda.—November 15, 27.

Santa Clara.—The seismographs recorded disturbance No. 17, on November 5, beginning about 9:18:40 and ending 9:25:24 a. m.; No. 18, on November 6, beginning 12:34:06 and ending 1 p. m.; No. 19, November 8, beginning 10:36:10 a. m. and ending 10:41:30; No. 20, on November 25, beginning 9:04:24 p. m., ending 10:02 p. m.

It may be of interest to note that three well-equipped seismological observatories are now established in this district—namely, Santa Clara, the Lick Observatory, and the University of California at Berkeley. The instruments used are the Wiechert 80-kilogram astatic horizontal and vertical and the Bosch-Omori with recent improvements.

NOTES ON THE RIVERS OF THE SACRAMENTO AND SAN JOAQUIN WATERSHEDS FOR NOVEMBER, 1910.

By N. R. TAYLOR, Local Forecaster.

Sacramento watershed.—Owing to the shortage of rainfall, which was marked in the lower Sacramento Valley and the foothills thereof, low stages prevailed in all streams throughout this watershed, and the general average was only slightly above that of the preceding month. At most points in the Sacramento River and throughout the drainage basins of the American and Feather-Yuba territory the water was the lowest of any November of which there is a record.

San Joaquin watershed.—Showers were fairly well distributed over this watershed from the 8th to 28th, inclusive, and relatively heavy rains fell generally on the 25th, but there was little deviation from the prevailing low stages of water in any of the streams.

PEACHES AND CLIMATE.

By Prof. W. T. CLARKE, University of California.

This is a portion of a paper on choosing a proper location for peach orchards, and is published by the courtesy of the editor of the California Fruit Grower.

* * * * * * *

The next item we wish to call attention to as of extreme importance in the matter of choice of location of the peach orchard is the climatic conditions prevalent where it is intended to make the plantings. In our survey of regions in California where peach orchards are successfully grown we have noted the fact that the Sierra foothills to the floor of the main valleys and from the smaller interior valleys to valleys opening upon the ocean, from the north to the south, these plantings are found.

In a geographical distribution so great as this, involving as it does very considerable differences in altitude, in ocean exposure, and in other modifying influences, it will be readily seen that the general climatic conditions will hardly be identical in all of the sections studied. In the orchard regions of the Sierra foothills we find that the peach plantings are in what may be termed a thermal belt. This means that great extremes, especially of cold, are not found prevalent in the section. Frosts are rare and indeed practically unknown at the critical period of the trees' development in the spring, the time of blossoming. Even in those Sierra sections where peaches are grown and where frosts do occur the orchards are placed on sloping ground on side hills, and the cold air drains away and thus damage from this cause is avoided. We will then emphasize this point of fairly mild conditions prevailing at blossoming time where successful work with the peach is done in this region.

Again, in the smaller valleys opening into the great Sacramento Valley we find the same fairly mild conditions to be the rule where the orchards are continuously successful. The summer temperatures in both the regions range from high to very high, while the spring temperatures are not excessively low. The same conditions, with perhaps here and there slight modifications, hold for those sections of the main valley where we have found the peach to be a good and paying crop. Of course in the main valley we may expect to and do find sharper changes than in the regions previously noted. This is due to the fact that the surroundings offer less in the way of protection than in these other regions. Nevertheless the rule of fairly mild conditions at the period of blossoming holds here as a general rule, as does that other rule of quite high and well-sustained summer temperatures.

Follow southward into the San Joaquin Valley peach sections and we find, as far as climatic conditions are concerned, that this same set of rules holds with a fair degree of regularity. The most constant variation from the regions we have before studied is perhaps in the matter of summer temperatures. In this last noted section we may perhaps find an average higher summer temperature in the San Joaquin Valley peach sections than in the more northern sections. Incidentally we may look upon this as an advantage, more especially if we are growing peaches for drying purposes. The point we wish to emphasize now, however, is this matter of the absence of killing frosts at the period of bloom and the general high temperatures through the summer.

Going across the range of mountains into the more southerly peach sections of the State, we find the mild spring conditions and the high to very high summer conditions of temperature repeated; and where these conditions do not prevail we can be fairly sure that peach growing is, comparatively speaking, an unremunerative business.

Again, in those valleys along the Pacific coast line where any notable degree of success in peach growing has been attained, we find that the observed rule of mild spring conditions holds with a very fair degree of regularity. The summer temperatures in these valleys may not be as high on the average as in the regions before studied, yet they are fairly high. We have also noted previously that, owing to the topography of these valleys, the sometimes harsh and moisture-laden sea breezes are deflected and do not exert any deleterious influence upon the orchards. Where this is not the case and the trees grow unprotected from the ocean breezes the growing of peaches is by no means the success that it undoubtedly is where nature is disposed to be more kindly in her actions. We thus see that in spite of the difficulties in altitude, in exposure, in northern or southern location, the peach-growing sections of California exhibit in their climatic conditions certain quite marked similarities.

The intending planter should, then, in making his decision as to whether or not he will plant a peach orchard see to it that he knows well just what the climatic conditions are in the region where he intends to do business. It is decidedly important, too, that his acquaintance is complete, covering not alone a single year in its entirety, but extending over a term of years. He can not afford to determine from a single year's record what the general conditions may be expected to be. This, of course, does not necessarily mean that one should live for a term of years in a region gathering data to determine whether or not he shall plant a peach orchard. In most parts of the State rather full and complete weather records have been kept for years past. These records are available and can be used by anyone who cares to look them up. Indeed, it is the experience of this writer that many of the reported failures in orchard work here in California can be traced to causes that might easily have been avoided had the planter only understood that sources of information in regard to previously existing climatic conditions are available and, understanding this, had intelligently used this information. The climatic conditions which the orchard will have to meet are prime factors in the problem, and if these factors are neglected the results may be disastrous.

A PECULIAR SQUALL.

By A. G. MCADIE.

On November 21, 1910, at 4:45 a. m., there was a marked disturbance in atmospheric pressure at San Francisco. The morning was comparatively quiet with light winds; suddenly and without any of the usual preliminary signs of air movement, the wind rose, and gusts, varying in velocity it is estimated from 20 to 30 miles, occurred. The barometer fell rapidly and then rose rapidly. From 4:52 a. m. to 5:12 a. m. 7 miles of wind were recorded. At Oakland, about 7 miles due east, the wind movement was 6 miles, from 4:57 to 5:15 a. m.

The character of the disturbance was so unusual that it attracted general attention. Prof. Charles Burckhalter, of

the Chabot Observatory, called attention to the disturbance as recorded in Oakland. Mr. F. Westdahl, in charge of the Coast and Geodetic Survey, discovered in examining the maregram for November that unusual markings appeared on November 21, beginning at 4:30 a. m. and ending at 12:30 p. m. It was at first thought that this record was evidence of some submarine disturbance, such as the dislocation of the sea bottom. The water rose more than a foot, falling again and fluctuating as shown on the record. It seems, however, more consistent with our present knowledge, to regard the disturbance as atmospheric rather than submarine, and to assume that the water simply responded to the sudden and violent change in air pressure. The records made upon the various barographs are indeed not unlike records made by typhoons, or baguios, only not so marked. The disturbance was described by one observer as a baby tornado, which however is not a fitting description. The following letter from Dr. W. W. Campbell, director of the Lick Observatory, gives a full and graphic description of the disturbance as noted at the observatory by various well-trained observers. The observatory is 57 miles in an air line southeast of San Francisco, at an elevation of 4,209 feet above sea level. It may be stated that for some years past the character of certain pressure fluctuations has been a subject of discussion and observation in connection with both astronomical and meteorological problems.

MOUNT HAMILTON, CAL., *December 9, 1910.*

DEAR PROFESSOR MCADIE: Your inquiry of December 6, for evidences of a barometric disturbance on the morning of the 21st is here. We can supply much information, which may be of some value. I inclose a tracing from the barograph of the Lick Observatory, from which it appears that there was a sudden fall in pressure at about 5:10 a. m., and that the minimum of pressure occurred about 6:20 a. m.

A most remarkable wind squall occurred, undoubtedly in this connection, about 6:20 a. m. of that day. Essentially every member of our staff noted it as a remarkable phenomenon. Here is Doctor Curtis's report:

"The sudden powerful gust of wind about which Doctor McAdie requests information was unlike anything I had before experienced on Mount Hamilton. I made, however, no notes of the phenomenon at the time. It occurred between 6 and 6:30 a. m., and I was awake at the time. It could be heard approaching over the hills for a few seconds before it struck the house, and apparently came from about northwest by north. My recollection is that it did not last much longer than half a minute in its full intensity. It perceptibly shook the house (brick; bedroom is on second story), and I would estimate its velocity at 50 or 60 miles per hour. It died out almost as quickly as it came."

I was asleep at the time, but was suddenly wakened by the vibration of our brick house, which was even communicated to my bed on the second floor. The roar which the wind made in approaching did not waken me, but I was suddenly awakened by the noise around the house, and by the vibrations referred to. I should estimate the wind at 60 miles per hour. The wind when blowing did not strike me as remarkable, because I had not noticed its beginning, but the short duration of the violent wind, with sudden slowing down to a calm, did strike me as remarkable. I should estimate that the severe wind lasted two minutes, and that it came from the northwest.

The testimony of other members of our staff is to the effect that the roar of the approaching wind was distinctly heard by those who were awake at the time; that the squall struck us suddenly; that it lasted two or three minutes at the extreme, and that the dead calm was quickly substituted for the high velocity. The remainder of the morning was quite calm, as you will see from the anemometer data ticked off on the lower margin of the barograph copy. From 5:30 to 7 a. m. we had but 5 miles of wind, and probably 2 miles of this occurred inside of two minutes, leaving the remaining 3 miles to have occurred in one hour and 28 minutes.

I shall be interested to know what you make out of the very remarkable phenomenon.

Very sincerely yours, W. W. CAMPBELL.

P. S.—Below is Professor Wright's written report of the phenomenon:

"I am unable to state the date, nor with certainty the hour of occurrence of the phenomenon, but my impression is that it happened at about sunrise. I was lying in bed at the time, and had noted the calmness of the atmosphere, when suddenly I heard the roar of the wind in the heavy brush on the north side of the mountain. Almost immediately the squall was about us, with the accompaniment of considerable noise and a lively slashing of the curtain of an open east window. There was no other window or door open in the room. In another room the wind blew violently in through a window facing the northeast. The blow was short-lived. My impression is that it lasted a few minutes, but I can not state with certainty at this late date that it was longer than a minute."

Records were also obtained from Santa Clara College, San Jose, Mount Tamalpais, Point Reyes Light, Sacramento, Eureka, and Fresno. The report from the last-named station follows and is given prominence because attention is called to further peculiar pressure oscillations during the month of December, 1910. Somewhat similar perturbations have been found in the pressure record at San Francisco and are also shown on the markings of the tide gage. Reference will be made to these in the December issue.

Fresno.—I forward a copy of our barograph trace for November 21. Being twice removed from the original it is more or less inaccurate, but shows the beginning of an unsettled pressure condition at about the time you mention, although in our case it continued throughout the day. I notice a feature in the barograph record here that is not common to the records of other stations with which I am familiar. Of course you are familiar with pressure records during thunderstorms, but here are oscillations of small amplitudes and short periods lasting more than a day.—*W. E. Bonnett, Local Forecaster.*

Mount Tamalpais.—The official in charge, Mr. H. Legler, states that the same disturbance noted at San Francisco occurred at his station, and furnishes the following hourly wind movement from midnight to noon:

Time.	Velocity.	Direction.	Time.	Velocity.	Direction.	Time.	Velocity.	Direction.
	Miles.			*Miles.*			*Miles.*	
12–1 a. m.	10	nw.	4–5 a. m.	17	se.	8–9 a. m.	8	w.
1–2 a. m.	9	nw.	5–6 a. m.	34	nw.	9–10 a. m.	10	w.
2–3 a. m.	12	nw.	6–7 a. m.	26	nw.	10–11 a. m.	7	nw.
3–4 a. m.	8	nw.	7–8 a. m.	10	nw.	11–12 a. m.	4	sw.

The maximum wind velocity was 44 miles per hour from the northwest at 5:10 a. m.

Point Reyes Light.—The official in charge, Mr. James Jones, states that about 3:45 a. m. the barometer began to fall rapidly, and within fifteen minutes dropped 0.15 of an inch. At the same time the wind which had veered around from north to northeast suddenly changed to southeast and increased from 2 miles to 32 miles per hour. The squall passed as suddenly as it came. The pressure increased at the same rate that it had decreased, the wind changed to the west and became gentle, and by 4:15 a. m. the entire disturbance had passed.

San Jose.—The official in charge, Mr. Maurice Connell, states that there was an unusually rapid fall and rise in the barometer between the hours of 4 and 6 a. m. The rise was in the nature of a sudden jump of 0.09 inch. The pressure then remained steady. When the sudden rise occurred, the wind as suddenly changed from southeast to west with a squall of two minutes' duration from the west at 6:22 a. m. The maximum velocity was 18 miles per hour.

Eureka.—The official in charge, Mr. Aaron H. Bell, states that the wind was from the south and southeast on the morning of November 21, the highest velocity being 20 miles from the south at 2:15 a. m. It is quite probable that the wind blew with greater violence at sea. The barograph shows an unsettled pressure condition, the most marked disturbance being from 1 a. m. to 4 a. m.

While the disturbance may have been and probably was essentially atmospheric and due to causes akin to those operating in the development of any low pressure, there is one possible cause of origin which should not be overlooked. It is well known that volcanic disturbances in the Aleutian Islands, Alaska, and in the Bering Sea are not infrequent. A

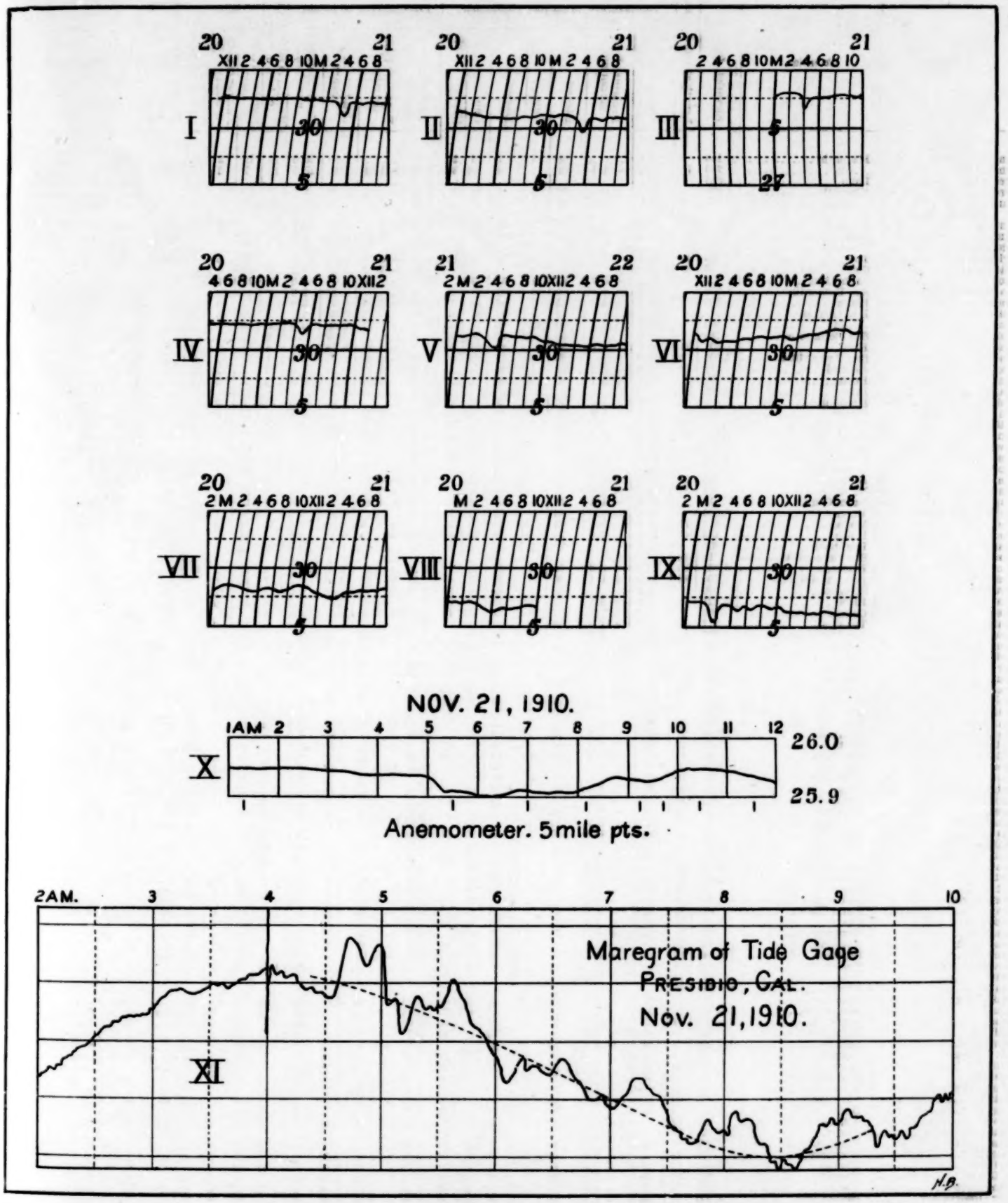
press dispatch states that Capt. E. E. Hofman, of the power schooner *P. J. Abler*, the last vessel to leave Bering Sea, reports that Mounts Pavloff and Shishaldin were in eruption on October 17, when the *Abler* was 40 miles out to sea, and flames could be observed rising from the crater of Pavloff. H. Benson, a Swedish trapper, whose camp is on a sandspit of Unimak Island, near the outlet of False Bay, told Capt. Hofman of much damage on Unimak Island by recent volcanic disturbances around Mount Shishaldin.

While the evidence thus far available can not be said to directly connect the atmospheric disturbance of November 21 with any known eruption or volcanic disturbance, it would be unwise to ignore the fact that the region to the northwest of our Pacific coast is one in which violent and sudden atmospheric pressure changes might be originated by volcanic action.

List of barograph traces.

I. Chabot Observatory, Oakland, Cal., elevation 36 feet.
II. San Francisco, elevation 200 feet.
III. Mount Tamalpais, elevation 2,375 feet.
IV. Santa Clara College, elevation 90 feet.
V. San Jose, elevation 95 feet.
VI. Eureka, elevation 64 feet.
VII. Fresno, elevation 293 feet.
VIII. Sacramento, elevation 71 feet.
IX. Point Reyes Light, elevation 490 feet.
X. Lick Observatory, elevation 4,209 feet.
XI. Maregram of tide gage at San Francisco, sea level.

Note the sudden rise in the level of the water in the Golden Gate at 4:35 a. m., amounting approximately to 15 inches, and the marked fall after 5 a. m., and subsequent fluctuations. Compare with the change in pressure at San Francisco, amounting to 0.15 of an inch.



No. XI. By courtesy of the U. S. Coast and Geodetic Survey.

TABLE 1.—*Climatological data for November, 1910. District No. 11, California.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon.																				
Klamath Agency	Klamath	4,169	2	35.1	.....	68	3	9	15	55	6.80	.....	1.40	26.0	13	12	2	16	s.	Edson C. Watson.
Klamath Falls	....do	4,250	15	36.4	− 3.3	66	1	4	25†	38	5.18	+ 3.84	1.45	13.5	12	7	6	17	nw.	W. H. Heilman.
Lakeview	Lake	4,800	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. L. Wharton, jr.
Merrill	Klamath	4,070	4	38.0	.....	72	1	3	26	47	4.20	.....	2.00	7.0	5	10	11	9	.....	Mrs. Agnes Ritchson.
Yonna	....do	.....	3	35.6	.....	68	1	−10	25	49	6.52	.....	1.74	20.5	11	7	10	13	s.	Jacob Rueck.
California.																				
Alameda	Alameda	.....	1	52.9	.....	72	1	38	26	....	0.06	.....	0.02	0.0	3	7	16	7	w.	Chas. E. Sears.
Alturas	Modoc	4,460	6	39.2	.....	75	1	− 1	26	53	2.59	.....	0.70	9.0	10	9	9	12	sw.	Prof. C. B. Towle.
Anderson (near)	Shasta	550	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. S. Richardson.
Angiola	Tulare	208	10	43.8	−10.3	67	2†	30	16†	30	0.30	− 0.35	0.30	0.0	1	19	0	11	nw.	Santa Fe Co.
Antioch	Contra Costa	46	31	.....	.....	.....	.....	.....	.....	.....	0.02	− 1.46	0.02	0.0	1	13	0	17	.....	Southern Pacific Co.
Aptos	Santa Cruz	102	25	52.3	− 0.7	69	1	34	27†	....	0.73	− 2.46	0.45	0.0	2	16	1	13	nw.	Do.
Arrowhead Springs	San Bernardino	2,000	1	65.2	.....	83	10	51	27	21	0.90	.....	0.50	0.0	2	.....	.....	.....	.....	G. I. Royce.
Auburn	Placer	1,360	9	52.0	− 3.0	75	2	33	26	31	1.49	− 2.44	0.49	0.0	5	15	5	10	ne.	Southern Pacific Co.
Avalon	Los Angeles	.....	.....	59.1	.....	69	4	47	27	18	0.08	.....	0.08	0.0	1	22	6	2	.....	W. N. Vilas.
Azusa	....do	540	8	60.1	.....	90	29†	34	28	52	0.41	− 1.27	0.18	0.0	3	26	1	3	.....	A. P. Griffith.
Bagdad	San Bernardino	784	7	62.8	.....	85	1†	38	28	31	0.00	.....	0.00	0.0	0	.....	.....	.....	.....	Santa Fe Co.
Bakersfield	Kern	404	21	60.6	+ 4.7	88	1	40	27	38	1.37	+ 0.99	0.78	0.0	4	21	7	2	.....	Do.
Barstow	San Bernardino	2,105	7	58.6	.....	90	3†	26	28	45	0.03	− 0.30	0.03	0.0	1	17	11	2	w.	E. L. White.
Berkeley	Alameda	317	23	52.4	− 2.2	66	1	38	26	16	0.87	− 1.93	0.40	0.0	5	8	12	10	sw.	State University.
Biggs	Butte	98	11	62.8	+10.1	80	2†	40	26	....	0.36	− 2.24	0.35	0.0	2	8	2	20	s.	Southern Pacific Co.
Bishop	Inyo	4,450	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Chalfant.
Blocksburg	Humboldt	1,700	4	46.8	.....	80	1	26	25	42	10.77	.....	1.95	0.0	12	5	6	19	se.	Victor Hope.
Blue Canyon	Placer	4,695	11	47.2	+ 1.9	75	3†	18	26†	40	5.39	− 2.62	1.35	6.0	8	10	0	20	s.	Southern Pacific Co.
Blythe	Riverside	.....	1	59.9	.....	91	2	32	30	48	1.98	.....	0.81	0.0	4	21	5	4	.....	H. V. Blenkiron.
Branscomb	Mendocino	2,000	10	47.9	.....	82	1	25	26	41	14.45	− 0.52	2.91	0.0	12	12	7	11	sw.	A. J. Haun.
Brawley	Imperial	−105	1	61.8	.....	90	1	34	29	42	.....	.....	.....	0.0	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Brush Creek	Butte	2,140	6	47.4	.....	70	1†	26	29	36	5.63	.....	2.03	0.0	4	12	3	15	s.	Cal. Gas & Electric Co.
Calexico	Imperial	0	5	63.4	.....	88	1†	36	29	36	T.	.....	T.	0.0	0	23	1	6	nw.	J. E. Peck.
Caliente	Kern	1,290	34	67.0	+11.8	80	1†	45	25	....	0.39	− 0.39	0.09	0.0	6	.....	.....	.....	.....	Southern Pacific Co.
Calistoga	Napa	363	38	52.7	− 0.7	76	8†	30	24†	....	1.60	− 2.19	0.62	0.0	5	17	0	13	w.	Do.
Campbell	Santa Clara	217	13	51.8	− 1.5	78	1	30	19†	40	0.17	− 1.41	0.12	0.0	2	14	6	10	nw.	F. M. Righter.
Camptonville (near)	Yuba	3,500	3	50.6	.....	80	1	32	19†	39	5.68	.....	1.42	0.0	9	14	1	15	.....	S. B. Johnson.
Cedarville	Modoc	4,675	16	41.8	+ 2.9	69	1†	14	27	39	2.36	+ 0.28	0.60	2.0	10	14	15	1	sw.	T. H. Johnstone.
Chico	Butte	189	40	53.4	− 0.4	76	1†	28	26	38	0.86	− 1.70	0.31	0.0	5	15	2	13	s.	Butte Co. R. R.
China Flat	Humboldt	600	1	51.0	.....	73	2	30	5	38	8.57	.....	1.68	0.0	12	8	6	16	s.	O. I. Westerburg.
Chino	San Bernardino	714	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Cisco	Placer	5,939	39	42.0	+ 3.3	70	8†	20	26	....	7.30	+ 2.20	2.65	21.0	8	17	2	11	s.	Do.
Claremont	Los Angeles	1,200	18	58.4	+ 1.1	86	30	37	27	44	0.84	− 1.12	0.44	0.0	7	15	6	9	.....	F. P. Brackett.
Cloverdale	Sonoma	340	8	52.8	.....	83	1	32	6	38	2.57	.....	1.05	0.0	8	14	12	4	n.	Lloyd Browne.
Colfax	Placer	2,421	39	53.8	+ 2.1	77	1†	33	19	34	2.45	− 2.48	0.80	0.0	5	17	0	13	.....	Southern Pacific Co.
Colusa	Colusa	60	7	54.2	.....	77	23	32	1†	45	0.20	− 1.64	.....	0.0	1	.....	.....	.....	.....	W. K. De Jarnatt.
Corning	Tehama	277	24	66.9	+11.8	80	2†	50	25†	....	0.77	− 1.45	0.42	0.0	3	12	0	18	s.	Southern Pacific Co.
Cuyamaca	San Diego	4,677	11	47.2	+ 2.5	71	2	27	26	31	2.62	− 1.79	1.40	T.	5	14	9	7	e.	L. L. Macquarie.
Daunt	Tulare	4,000	3	38.8	.....	60	1	28	13†	26	1.96	.....	0.85	2.0	3	16	7	7	.....	D. L. Wishon.
Davisville	Yolo	51	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. H. Beckett.
Deer Creek	Nevada	3,700	3	44.0	.....	72	1	21	26	34	4.64	.....	1.57	1.0	10	8	10	12	w.	Cal. Gas & Electric Co.
Delta	Shasta	1,138	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Denair	Stanislaus	126	10	54.0	− 0.6	76	2†	29	28	41	0.04	− 1.43	0.04	0.0	1	20	4	6	.....	Santa Fe Co.
Dobbins	Yuba	1,650	6	55.1	.....	78	1	34	26	32	2.93	.....	0.82	0.0	10	4	19	7	.....	Cal. Gas. & Electric Co.
Dudleys	Mariposa	3,000	1	46.3	.....	73	2	22	26†	41	2.38	.....	0.90	0.0	5	9	11	10	n.	W. H. Dudley.
Dunnigan	Yolo	65	33	59.7	+ 4.7	75	7	42	30	....	0.14	− 1.93	0.10	0.0	2	11	5	14	n.	Southern Pacific Co.
Dunsmuir	Siskiyou	2,285	21	44.6	− 0.3	75	1†	26	26	....	10.34	+ 3.85	1.95	6.0	14	12	0	18	n.	Do.
Durham	Butte	160	15	53.0	+ 2.0	80	1	29	26	41	0.66	− 2.29	0.32	0.0	3	10	7	13	s.	R. W. Durham.
El Cajon	San Diego	482	11	58.8	− 1.3	84	30	33	21†	50	0.88	− 0.51	0.43	0.0	4	23	0	7	sw.	H. H. Kessler.
Electra	Amador	725	6	55.2	.....	74	1†	34	26†	32	1.87	.....	1.03	0.0	5	18	7	5	.....	Cal. Gas & Electric Co.
Elsinore	Riverside	1,234	15	57.1	− 2.1	84	30	27	20†	56	0.19	− 1.55	0.10	0.0	3	22	6	2	w.	W. H. Bohannon.
Emigrant Gap	Placer	5,230	36	45.4	+ 2.4	60	1†	30	15	29	5.00	+ 0.47	2.50	4.0	4	22	0	8	.....	Southern Pacific Co.
Escondido	San Diego	657	16	56.6	+ 1.5	81	21†	25	29	55	1.27	− 0.17	0.51	0.0	4	2	26	2	w.	A. R. Moon.
Eureka	Humboldt	64	24	50.6	− 0.4	66	9	34	26	20	6.86	+ 1.54	1.65	0.0	15	2	8	20	se.	U. S. Weather Bureau.
Farmington	San Joaquin	111	31	55.4	+ 0.7	80	1	34	30	....	0.38	− 1.33	0.34	0.0	2	19	6	5	nw.	Southern Pacific Co.
Folsom	Sacramento	252	38	54.8	− 0.8	80	1	33	26	34	0.98	− 1.79	0.44	0.0	6	15	7	8	.....	F. O. Hutton.
Fordyce Dam	Nevada	6,500	15	37.6	.....	62	1	8	28	29	6.91	− 0.40	1.45	19.0	10	7	14	9	sw.	E. E. Roening.
Fouts Springs	Colusa	1,650	6	49.8	.....	82	1	24	26	40	1.87	.....	0.67	0.0	7	.....	.....	.....	.....	H. S. Green.
Fresno	Fresno	293	23	54.9	+ 0.3	78	1	34	19	31	0.24	− 0.93	0.13	0.0	3	12	14	4	nw.	U. S. Weather Bureau.
Fruto	Glenn	624	21	51.8	− 4.3	76	1	30	26	....	0.55	− 1.37	0.18	0.0	5	16	0	14	s.	Southern Pacific Co.
Galt	Sacramento	49	32	55.8	+ 1.8	76	22	34	28	....	0.20	− 1.75	0.20	0.0	1	19	3	8	sw.	Do.
Georgetown	El Dorado	2,650	37	50.4	− 5.0	73	1	27	26	34	3.24	− 3.07	1.47	0.0	7	.....	.....	.....	.....	H. D. Jerrett.
Gilroy	Santa Clara	193	36	51.0	− 1.8	85	1	30	29	....	0.44	− 1.78	0.31	0.0	3	22	0	8	se.	Southern Pacific Co.
Gold Run	Placer	3,222	11	49.8	− 2.0	74	1†	28	26	25	3.65	− 2.60	1.30	0.0	6	13	6	11	se.	Do.
Gonzales	Monterey	127	11	55.8	+ 4.1	85	1	32	19†	....	0.27	− 1.35	0.22	0.0	2	14	4	12	n.	Do.
Grass Valley	Nevada	2,690	38	48.5	.....	73	1	25	26	30	2.71	− 2.87	0.84	0.0	7	10	11	9	s.	F. R. Hull.
Greenville	Plumas	3,600	16	44.0	+ 3.4	77	1	21	5	51	4.44	− 0.20	1.15	T.	8	14	5	11	sw.	C. H. Higbie.
Groveland	Tuolumne	2,828	1	48.7	.....	73	1	25	26	35	2.27	.....	1.07	0.0	4	15	13	2	.....	H. S. Richardson.
Guida	Yolo	350	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Hanford	Kings	249	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Healdsburg	Sonoma	110	17	51.9	− 2.1	78	1	32	12†	40	2.13	− 2.48	0.54	0.0	9	8	0	22	.....	John Favour.
Hearst	Mendocino	1,800	....	51.6	.....	79	1†	32	18†	43	6.05	.....	1.40	0.0	9	11	9	10	nw.	H. D. Ellmaker.
Heber	Imperial	−20	4	63.6	.....	92	2	35	28	40	0.06	.....	0.04	0.0	2	26	0	4	.....	E. T. Chumard.
Hollister	San Benito	284	36	53.2	− 1.3	84	1	30	27	43	0.37	− 1.11	0.20	0.0	4	13	8	9	w.	J. N. Thompson.
Hornbrook	Siskiyou	2,154	22	45.9	+ 3.2	70	1†	25	5	....	3.00	+ 0.49	0.50	6.0	8	10	16	4	.....	Southern Pacific Co.
Hot Springs	Tulare	3,300	3	48.6	.....	73	2	28	27	36	1.08	.....	0.40	0.0	5	18	1	11	.....	U. S. Forest Service.
Hullville (near)	Lake	2,250	3	48.6	.....	83	1	25	26	38	7.07	.....	1.76	1.0	10	1	13	16	nw.	John Duggan.
Idyllwild	Riverside	5,250	9	46.5	.....	73	30	25	19†	42	2.40	.....	1.05	0.0	6	16	7	7	sw.	Earl Powers.
Independence	Inyo	3,907	14	48.0	− 1.2	76	1	22	21	42	0.02	− 0.09	0.02	0.0	1	20	9	1	s.	U. S. Weather Bureau.
Indio	Riverside	−20	32	65.0	+ 2.4	94	1	38	21†	41	0.30	+ 0.11	0.30	0.0	1	19	11	0	se.	F. N. Johnson.
Inskip	Butte	4,975	3	44.0	.....	82	1	20	26	30	9.63	.....	2.75	2.0	9	6	6	18	.....	Cal. Gas & Electric Co.
Ione	Amador	287	32	55.6	+ 2.2	80	2	32	26†	....	0.80	− 1.36	0.60	0.0	3	13	0	17	sw.	Southern Pacific Co.
Iowa Hill	Placer	2,825	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. F. Macy.
Jamestown	Tuolumne	1,471	7	51.2	.....	79	1	20	28	37	0.99	.....	0.75	0.0	3	17	9	4	.....	Sierra Ry. of California.
King City	Monterey	333	23	54.4	+ 0.6	90	2	23	21†	54	0.23	− 1.23	0.19	0.0	2	27	0	3	n.	Southern Pacific Co.
La Porte	Plumas	5,000	16	42.4	+ 2.8	65	6	15	26	33	9.38	− 1.22	2.00	6.0	12	12	4	14	n.	C. W. Hendel.
La Grand	Merced	255	10	49.6	− 4.0	76	1	30	15†	36	0.73	− 1.24	0.73	0.0	1	20	0	10	.....	Santa Fe Co.
Lemoncove	Tulare	600	15	56.4	+ 0.8	80	1†	31	30	35	0.45	− 1.11	0.26	0.0	2	17	6	7	n.	G. W. Sandidge.
Lick Observatory	Santa Clara	4,209	21	48.0	− 1.4	68	1	28	25†	23	0.94	− 2.01	0.50	0.0	5	20	9	1	n.	The Director.
Livermore	Alameda	485	39	54.3	− 0.6	81	1	30	26	42	0.10	− 1.66	0.05	0.0	2	15	7	8	w.	E. G. Still.
Lodi	San Joaquin	45	28	51.4	− 2.2	72	10	28	26	33	0.21	− 2.28	0.12	0.0	2	14	11	5	w.	Ezra Fiske.
Lone Pine	Inyo	2,728	5	48.6	.....	75	1	20	30	43	0.08	.....	0.08	0.0	1	15	12	3	s.	G. F. Marsh.

TABLE 1.—*Climatological data for November, 1910. District No. 11*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
California—Continued.																				
Long Valley	Lassen	4,400	1	43.4	.....	69	2	20	26	35	1.16	.....	0.76	T.	6	6	8	16	sw.	A. G. Evans.
Los Angeles	Los Angeles	293	33	60.3	+ 1.9	85	29	43	27	35	0.15	− 1.23	0.09	0.0	4	13	8	9	ne.	U. S. Weather Bureau.
Los Banos	Merced	121	23	57.9	+ 3.5	84	1	30	26	....	0.26	− 0.83	0.18	0.0	2	14	1	15	w.	Southern Pacific Co.
Los Gatos	Santa Clara	600	23	54.0	− 0.3	78	1	35	26	30	0.58	− 3.28	0.43	0.0	4	19	5	2	n.	F. H. McCullagh.
Lytle Creek	San Bernardino	2,900	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. E. Anderson.
Macdoel	Siskiyou	4,258	3	34.2	.....	63	1	10	25†	42	2.97	.....	0.90	14.0	9	8	7	15	nw.	B. V. L. Co.
Madeline	Lassen	5,270	1	38.4	.....	75	1	2	26	50	2.04	.....	0.40	4.0	9	8	11	11	sw.	J. H. Williams.
Magalia	Butte	2,321	6	49.7	.....	83	8†	30	26	43	7.99	.....	4.83	0.0	7	11	6	13	se.	Butte County R. R. Co.
Mammoth Tank	Imperial	257	32	70.5	+ 6.7	103	1†	38	30	55	0.91	+ 0.77	0.91	0.0	1	23	1	6	w.	Southern Pacific Co.
Marysville	Yuba	67	39	53.7	− 2.7	74	1	31	26	35	0.55	− 1.49	0.40	0.0	2	13	0	17	s.	Do.
Mecca	Riverside	−185	4	63.5	.....	92	2	34	30	48	0.85	.....	0.85	0.0	1	25	2	3	e.	A. Lunsted.
Menlo Park	San Mateo	64	32	54.2	+ 1.0	68	1†	36	26	....	0.20	− 1.60	0.20	0.0	1	22	0	8	nw.	Southern Pacific Co.
Merced	Merced	173	36	53.6	− 1.8	72	1	26	28	36	0.43	− 0.82	0.26	0.0	3	17	0	13	nw.	Santa Fe Co.
Mill Creek (1)	Amador	.....	3	47.5	.....	70	1	29	26	38	3.33	.....	1.52	0.0	6	15	9	6	s.	Cal. Gas. & Electric Co.
Milton (near)	Calaveras	660	19	55.8	− 0.5	76	1†	36	26	26	0.28	− 2.02	0.20	0.0	3	22	5	3	nw.	J. H. Southwick.
Modesto	Stanislaus	90[2]	38	58.9	+ 3.1	89	1	33	27	....	0.27	− 1.16	0.23	0.0	2	26	0	4	.....	Southern Pacific Co.
Mojave	Kern	2,751[2]	33	54.6	− 0.2	86	1	30	16†	45	0.00	− 0.40	0.00	0.0	0	22	0	8	.....	Do.
Mokelumne Hill	Calaveras	1,550[2]	17	53.4	+ 3.2	78	1	33	26	27	1.49	− 2.33	0.77	0.0	4	15	7	8	.....	C. E. Prindle.
Mono Ranch	Ventura	3,210[2]	4	48.3	.....	74	1	22	26	38	0.54	.....	0.20	0.0	4	19	4	7	ne.	H. Lathrop.
Montague	Siskiyou	2,450[2]	22	38.0	− 7.7	72	2	8	4	54	5.40	− 4.12	1.32	4.5	11	4	10	16	s.	G. H. Chambers.
Monterey	Monterey	15[2]	45	52.6	− 1.7	66	15†	36	27†	....	0.90	− 0.64	0.49	0.0	3	23	2	5	se.	Southern Pacific Co.
Monterio	Kern	4,500[2]	11	53.0	− 3.5	74	4	30	27	28	0.20	− 1.65	0.08	0.0	4	24	5	1	nw.	John C. Knecht.
Monumental	Del Norte	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. F. Morgan.
Mount Tamalpais	Marin	2,375	11	49.2	− 1.4	69	1	35	25	20	0.63	− 4.79	0.30	0.0	7	6	10	14	nw.	U. S. Weather Bureau.
Napa City	Napa	20	33	51.8	0.0	78	1	30	26†	38	0.58	− 2.30	0.18	0.0	6	10	15	5	s.	Thomas Hull.
Napa (S. H.)	....do	60	32	53.3	+ 1.5	81	1	34	26	36	0.39	− 2.33	0.15	0.0	5	6	13	11	sw.	W. H. Martin.
Needles	San Bernardino	477	18	63.5	+ 3.4	89	2	42	29	35	1.45	+ 1.21	0.73	0.0	5	24	0	6	.....	Santa Fe Co.
Nellie	San Diego	5,350[2]	1	49.6	.....	71	1	15	20	44	3.64	.....	1.04	0.0	5	24	6	0	.....	C. J. Bailey.
Nevada City	Nevada	2,580[2]	18	48.2	+ 1.2	77	1†	22	26†	42	2.79	− 4.08	0.72	0.0	9	18	0	12	sw.	S. W. Marsh.
Newcastle	Placer	970[2]	17	58.8	+ 3.9	80[2]	1	38	26	28	1.60	− 3.24	0.65	0.0	4	26	0	4	s.	George D. Kellog.
Newhall	Los Angeles	1,200[2]	33	52.8	− 2.0	85	1	32	28	....	0.78	− 0.78	0.71	0.0	2	17	0	13	se.	Southern Pacific Co.
Newman	Stanislaus	91[2]	21	58.3	+ 1.2	78[2]	1	41	28†	28	0.19	− 1.12	0.19	0.0	1	13	0	17	n.	E. S. Wangenheim.
Nimshew	Butte	2,500[2]	6	49.2	.....	73	1	26	26	38	5.52	.....	2.03	T.	13	13	2	15	.....	Cal. Gas & Electric Co.
North Bloomfield	Nevada	3,200[2]	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. G. Shand.
North Fork	Madera	3,000	6	50.7	.....	84	3	27	27	43	1.48	.....	0.57	0.0	3	5	17	2	sw.	G. H. Shinn.
Oakdale	Stanislaus	150[2]	16	53.6	+ 0.7	77	1	34	13†	....	0.39	− 1.61	0.33	0.0	2	15	11	4	nw.	Southern Pacific Co.
Oakland	Alameda	36	34	53.0	− 0.8	68	1	39	26	21	0.65	− 2.38	0.26	0.0	6	10	8	12	w.	Chabot Observatory.
Oceanside	San Diego	.....	.....	58.0	.....	70	1†	41	26†	21	0.77	.....	0.31	0.0	8	14	11	5	.....	H. D. Brodie.
Ojai Valley	Ventura	900	4	57.2	.....	87	29	28	26†	57	0.37	.....	0.28	0.0	5	19	5	6	sw.	W. H. Duncan.
Orland	Glenn	254	28	54.2	− 2.2	79	1	32	30	36	1.02	− 1.06	0.44	0.0	7	13	7	10	n.	W. W. Patch.
Orleans	Humboldt	520	7	52.4	.....	85	1	32	4†	45	11.60	.....	2.17	0.0	16	8	5	17	.....	Fred T. Hale.
Oroville (near)	Butte	250	26	54.8	− 2.3	81	1†	32	27	38	0.83	− 2.91	0.81	0.0	2	8	6	16	s.	E. D. Fairchild.
Palmero	....do	213	19	53.8	+ 1.4	78	1†	29	26	41	0.60	− 2.78	0.20	0.0	3	4	15	11	s.	Miss Hettie Boalt.
Palm Springs	Riverside	584	21	61.5	− 3.6	88	1	44	20	....	0.66	+ 0.37	0.35	0.0	3	22	1	7	e.	Southern Pacific Co.
Pasadena	Los Angeles	827	20	58.0	− 1.1	86	29	35	27	46	0.28	− 0.12	0.14	0.0	4	22	7	1	sw.	E. R. Sorver.
Paso Robles	San Luis Obispo	800	23	52.6	+ 1.0	89	2	17	28	55	0.17	− 1.26	0.10	0.0	3	24	2	4	nw.	Dr. F. W. Sawyer.
Peachland	Sonoma	190	14	52.4	0.0	89	1	29	26	52	1.91	− 2.78	0.98	0.0	11	9	13	8	s.	E. H. Parnell.
Penstock Camp	Tuolumne	3,750	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tuolumne W. P. Co.
Placerville	El Dorado	1,875	21	48.9	+ 0.8	70	2	28	26	31	2.23	− 2.98	1.08	0.0	5	22	4	4	.....	A. Baring Gould.
Point Lobos	San Francisco	250	17	55.6	+ 1.8	71	1	45	26	19	0.44	− 2.12	0.17	0.0	6	13	4	13	nw.	John Hyslop.
Point Reyes	Marin	490	18	52.4	− 0.6	75	1	44	26	20	1.18	− 2.22	0.46	0.0	10	5	9	16	nw.	U. S. Weather Bureau.
Porterville	Tulare	464	21	55.7	+ 0.8	82	1†	31	27†	39	0.36	− 0.44	0.20	0.0	4	19	4	7	.....	Harry E. Cowie.
Quincy	Plumas	3,400	15	47.6	+ 6.5	76	1†	22	4†	54	3.82	− 1.92	0.92	0.0	7	12	2	16	sw.	D. N. Rogers.
Red Bluff	Tehama	307	33	53.6	+ 0.2	77	1	35	26	32	2.78	− 0.32	1.64	0.0	9	12	4	14	nw.	U. S. Weather Bureau.
Redding	Shasta	552	35	53.4	− 0.7	85	1	36	26	26	2.96	− 0.83	0.99	0.0	8	11	0	19	n.	L. F. Bassett.
Redlands	San Bernardino	1,352	17	58.0	− 0.9	83	30	30	27	42	0.48	− 0.46	0.28	0.0	6	16	5	9	w.	Paul W. Moore.
Reedley	Fresno	347	10	53.8	− 1.3	77	5	30	28	34	0.47	− 0.38	0.17	0.0	3	18	1	11	s.	Santa Fe Co.
Rialto (near)	San Bernardino	2,250	4	60.1	.....	88	1	46	8†	26	0.65	.....	0.32	0.0	4	16	7	7	se.	So. California Edison Co.
Riverside	Riverside	851	28	56.7	− 1.5	82	30	32	28†	48	0.40	− 0.36	0.28	0.0	3	13	11	6	w.	C. W. Barton.
Rocklin	Placer	249	39	57.4	+ 3.5	86	7	31	26	37	0.60	− 1.69	0.30	0.0	3	18	0	12	ne.	Southern Pacific Co.
Rohnerville	Humboldt	75	7	50.8	.....	70	1	32	25	33	6.85	.....	2.13	0.0	9	7	6	17	se.	Dr. R. Callahan.
Sacramento (1)	Sacramento	71	33	53.2	− 0.2	78	1	34	26	32	0.17	− 1.98	0.09	0.0	4	9	11	10	se.	U. S. Weather Bureau.
Sacramento (2)	....do	35	57	53.1	− 0.4	72	1†	24	26	28	0.26	− 1.89	0.15	0.0	4	12	8	10	s.	S. H. Gerrish.
Saint Helena	Napa	255	2	51.6	.....	83	2	30	25	44	1.40	.....	0.61	0.0	6	.....	.....	.....	.....	B. F. Kettlewell.
Salinas	Monterey	40	36	55.0	+ 1.9	82	1	30	21	44	0.32	− 2.14	0.24	0.0	2	27	1	2	.....	Miss E. Ruth Abbott.
San Bernardino	San Bernardino	1,054	18	58.2	+ 0.8	87	30	30	29	55	0.54	− 0.91	0.26	0.0	6	15	13	2	sw.	Dr. A. K. Johnson.
San Diego	San Diego	93	39	58.7	− 0.3	74	3	43	27	23	0.40	− 0.38	0.18	0.0	6	15	10	5	nw.	U. S. Weather Bureau.
San Francisco	San Francisco	207	39	54.8	− 0.7	76	1	44	26	23	0.48	− 2.20	0.27	0.0	6	6	13	11	w.	Do.
San Jacinto	Riverside	1,550	17	58.8	+ 2.7	94	1	33	20	49	2.94	+ 1.56	2.15	0.0	6	17	4	9	.....	E. T. Tanner.
San Jose	Santa Clara	95	35	53.2	− 1.2	80	1	33	26	38	0.28	− 1.22	0.20	0.0	3	12	12	6	nw.	U. S. Weather Bureau.
San Leandro	Alameda	48	15	52.8	− 4.0	77	2	30	12	38	0.54	− 2.46	0.32	0.0	7	19	1	10	w.	E. B. Sanford.
San Luis Obispo	San Luis Obispo	201	15	57.0	+ 0.7	80	23	33	27	38	0.27	− 1.74	0.23	0.0	3	10	7	13	n.	U. S. Weather Bureau.
San Mateo	San Mateo	22	36	56.2	+ 2.4	72	1	40	26	....	0.29	− 2.20	0.15	0.0	3	12	11	7	nw.	Southern Pacific Co.
San Miguel	San Luis Obispo	616	23	55.8	+ 2.1	75	7	23	27†	....	0.20	− 0.91	0.20	0.0	1	10	9	11	.....	Do.
San Miguel Island	Santa Barbara	500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. G. Waters.
Sanger	Fresno	371	21	.....	.....	.....	.....	.....	.....	.....	1.40	+ 0.26	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Santa Barbara	Santa Barbara	130	26	57.3	− 1.8	80	22	36	28	33	0.33	− 1.27	0.21	0.0	3	18	8	4	w.	George W. Russell.
Santa Clara	Santa Clara	90	21	54.0	+ 0.1	83	1	31	20†	43	0.30	− 1.57	0.20	0.0	3	22	1	7	sw.	Santa Clara College.
Santa Cruz	Santa Cruz	20	37	53.1	− 2.4	75	10	32	26†	35	0.70	− 2.01	0.30	0.0	3	20	5	5	n.	W. R. Springer.
Santa Margarita	San Luis Obispo	996	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Santa Maria	Santa Barbara	220	22	52.5	− 5.3	71	21	34	24	30	0.15	− 1.12	0.15	0.0	1	25	0	5	sw.	L. E. Blochman.
Santa Monica	Los Angeles	110	25	54.8	− 5.4	70	6†	38	27	30	0.49	− 1.51	0.45	0.0	2	17	4	9	w.	N. D. Ingham.
Santa Rosa	Sonoma	181	21	51.9	− 2.0	82	1	29	26	45	1.76	− 1.26	0.71	0.0	12	2	19	9	sw.	M. L. McDonald, jr.
Selma	Fresno	311	24	54.8	+ 0.2	76	5	31	28	....	0.33	− 0.55	0.17	0.0	3	18	9	3	se.	Southern Pacific Co.
Shasta	Shasta	1,049	14	56.8	+ 3.8	95	2	28	26	53	5.00	− 1.24	1.87	0.0	6	19	1	10	sw.	Dr. T. J. Edgecomb.
Sierra Madre	Los Angeles	1,400	13	58.4	− 2.8	78	6†	41	27	28	0.79	− 1.12	0.29	0.0	5	16	4	10	se.	Mrs. A. C. Gregory.
Sierraville	Sierra	5,000	....	41.2	.....	76	11	12	26	51	1.87	.....	0.75	0.0	5	7	8	15	sw.	C. D. Johnson.
Sisson	Siskiyou	3,555	21	41.4	+ 0.3	65	2†	15	25	33	9.00	+ 5.10	1.53	18.0	12	7	0	23	s.	Southern Pacific Co.
Soledad	Monterey	188	36	57.3	+ 4.1	79	9	40	27†	....	0.27	− 0.82	0.27	0.0	1	26	0	4	n.	Do.
Southeast Farallones	San Francisco	30	7	52.8	.....	60	1	48	24	9	0.58	.....	0.34	0.0	6	8	12	10	nw.	U. S. Weather Bureau.
Sonora	Tuolumne	1,825	22	50.7	.....	69	1†	31	26	28	1.86	− 2.05	0.77	0.0	4	20	7	3	sw.	Charles P. Jones.
Stirling City	Butte	3,525	6	48.6	.....	81	2	26	26	43	6.40	.....	2.80	T.	10	11	13	6	se.	Butte County R. R. Co.
Stockton (S. H.)	San Joaquin	23	39	50.9	− 3.0	70	10	32	26	27	0.17	− 1.59	0.09	0.0	2	22	6	2	nw.	State Hospital.
Storey	Madera	296	10	51.7	− 1.6	74	4†	28	28	35	.....	.....	.....	0.0	....	20	0	10	nw.	Santa Fe Co.
Suisun	Solano	20	30	48.0	− 6.8	73	20†	37	27	....	0.30	− 2.01	0.30	0.0	1	24	5	1	w.	Southern Pacific Co.
Summerdale	Mariposa	5,270	14	.....	.....	.....	.....	.....	.....	.....	2.50	− 2.58	0.98	5.0	4	.....	.....	.....	.....	J. H. Lowry.
Summit	Placer	7,017	37	39.1	+ 3.3	69	5	8	26	36	5.46	+ 0.94	1.90	30.0	7	16	4	10	w.	Southern Pacific Co.

TABLE 1.—*Climatological data for November, 1910. District No. 11*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
California—Continued.																			
Susanville	Lassen	4,175	21	41.2	− 0.6	67	2	16	26	36	1.73	− 1.08	0.72	0.0	5	10	14	6	sw.	James Branham.
Tamarack	Alpine	8,000	4	33.2	.....	56	1	0	26	32	4.20	.....	1.60	34.0	8	13	5	12	sw.	William Bennett.
Tehachapi	Kern	3,964	33	48.9	+ 2.4	72	1	35	21	....	0.76	+ 0.20	0.40	0.0	3	...	...	...	.....	Southern Pacific Co.
Tehama	Tehama	220	39	49.0	− 6.1	80	13†	32	27	....	0.88	− 1.45	0.38	0.0	4	14	0	16	s.	Do.
Three Rivers	Tulare	870	....	54.8	.....	81	1†	28	30	42	0.67	.....	0.32	0.0	3	19	4	7	sw.	E. D. Barton.
Towle	Placer	3,704	24	48.2	− 0.8	78	1†	24	26†	49	4.22	− 2.24	1.60	0.0	7	11	1	18	s.	Southern Pacific Co.
Tracy	San Joaquin	64	30	...	...	...	...	...	...	....	0.05	− 1.10	0.05	0.0	1	19	5	6	nw.	Do.
Ukiah	Mendocino	620	17	51.0	− 0.2	83	1	28	26	47	2.51	− 1.39	0.70	0.0	9	...	...	...	.....	Dr. George McGowen.
Upland	San Bernardino	1,750	13	56.6	− 2.3	80	29	33	27	44	0.82	− 0.64	0.41	0.0	4	18	6	6	w.	A. P. Harwood.
Upperlake	Lake	1,350	25	48.4	− 3.0	80	1	27	26	38	1.84	− 0.94	0.62	0.0	7	14	5	11	nw.	C. M. Hammond.
Vacaville	Solano	175	22	57.6	+ 1.9	94	4	32	26	49	0.16	− 2.92	0.09	0.0	3	13	14	3	sw.	G. O. Coburn.
Valley Springs	Calaveras	673	21	55.5	− 0.7	74	1	38	26	....	0.60	− 2.02	0.49	0.0	3	12	13	5	w.	Southern Pacific Co.
Visalia	Tulare	334	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....	Santa Fe Co.
Werner Springs	San Diego	3,165	2	55.0	.....	83	1	30	26	39	1.77	.....	1.20	0.0	5	24	3	3	.....	Mrs. E. F. Sanford.
Wasco	Kern	336	10	48.3a	− 6.3	85	11	20	25	53	0.19	− 0.34	0.19	0.0	1	...	...	...	.....	Santa Fe Co.
Watsonville	Santa Cruz	23	14	52.5	− 3.6	84	1	28	27	46	0.68	− 3.14	0.32	0.0	3	7	18	5	sw.	Spreckels Sugar Co.
Westley	Stanislaus	90	21	55.7	− 1.3	77	2	30	29	....	0.26	− 1.13	0.16	0.0	2	18	2	10	.....	Southern Pacific Co.
Wheatland	Yuba	84	23	52.1	− 0.9	72	1	32	26	30	0.65	− 1.94	0.24	0.0	4	17	5	8	s.	Wm. Lumbard.
Willows	Glenn	136	31	52.6	− 2.2	73	1	31	26	31	0.65	− 1.21	0.25	0.0	5	10	3	17	s.	M. T. Harrington, jr.
Yosemite	Mariposa	3,945	6	44.0	.....	70	1	20	27†	38	1.37	.....	0.48	0.0	4	11	16	3	sw.	C. W. Tucker.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 11, California.*

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon.																																
Klamath Agency	Klamath							*	*	1.40								*	.70		*	.30	.50	*	1.40		*	1.20	1.30			6.80
Klamath Falls	do							T.	1.45			.23						.20	.21		.04	.21	.35	1.26	.78			.20	.24	.01		5.18
Lakeview	Pitt																															
Long Valley	do								.75	T.	T.	.16	.03				T.	.10	.47	*	*	*	*	*	*	2.57			.70			2.78
Merrill	Interior Drainage								.80			.30							.40					2.00	.70							4.20
Yonna	do							.05	.80	T.		.45						.20	.33		T.	.25	.58	1.20	1.74			.85	.07			6.52
California.																																
Aguanga	Coast			.60								.11	.68														.14					1.53
Alameda	do																	.02	T.					.02	.02							0.06
Alturas	Sacramento								.03			.32	.10					.09	.24		.03		.10	.40	.70	.52						2.59
Anderson	do																															
Angels Camp	San Joaquin												.38						.65						.85							1.88
Angiola	do											.30																				0.30
Antioch	do																	.02														0.02
Aptos	Coast																		.28							.45						0.73
Arrowhead Springs	do												.50					T.									.40					0.90
Auburn	Sacramento									.48		.04	.09						.39							.49						1.49
Avalon	Ocean			.08																												0.08
Azusa	Coast												.18	.13												.10						0.41
Bagdad	Desert																															0.00
Bakersfield	San Joaquin				.78								.33	.15												.11						1.37
Barstow	Desert													.03																		0.03
Bear River	San Joaquin																															
Bear Valley (1)	Sacramento								.78			.88						.80	.14				.46	.10	1.84							5.06
Bear Valley (2)	San Joaquin				.70								.23	.12						.15							.40					1.62
Bear Valley Dam	Coast			.18											.80											.27						1.25
Ben Lomond	do																	.18							1.05							1.23
Berkeley	do								.12			.15							.20						.40							0.87
Big Bar	Sacramento																															
Biggs	do																			.01						.35						0.36
Bishop	Owens																															
Bishop Creek	do																															
Blocksburg	Coast							1.68									.68	.51			.22	.55	.22	1.95	1.90	.05		2.30	.53	.18		10.77
Blue Canon	Sacramento								T.	1.00		.20	1.00						.39	.30				1.00	.15	1.35						5.39
Blythe	Desert				.29									.70	.81	.18																1.98
Boulder Creek	Coast																		T.							.77						0.77
Bowmans Dam	Sacramento																															
Branscomb	Coast								2.82			.50						.07	.88		.05	.60	.22	2.47	2.32	T.		2.91	1.18	.37		14.45
Brawley	Desert																															0.00
Brush Creek	Sacramento								1.80			1.00							.80									2.03				5.63
Burney	do								.40		T.	.77	.28					.11	.13				.17	.63	1.26	.83		T.	T.			4.58
Butte Creek House	do								.30		.40	.60	.05					.05	.50			.10	.15	.45	.40	.40		.20				3.60
Butte Valley	do									.49		.79	.17						.71		.07			.59	1.05	1.18		.09	.06			5.20
Calexico	Desert			T.										T.	T.																	T.
Caliente	San Joaquin			.03									.06	.07					.09							.08	.04					0.39
Calistoga	Coast										.62								.15				.13	.35				T.	.35			1.60
Campbell	do											T.							.05						.12							0.17
Campo	do			.38											.60												.14					1.12
Camptonville	Sacramento								1.42	.09		.60	.32						.91			.07	.22	1.10	.95							5.68
Cedarville	Mountain Lakes								.21			.43	.05					.02	.05		.09	.40	.33	.60	.18							2.36
Chester	Sacramento								.60	.01		.33	.40						.27		.07	.14	.67	.47	.25							3.21
Chico	do								T.			.06							.16						.31	.18		.15				0.86
Chico (near)	do								T.		T.	.05						T.	.15		T.	T.	T.	.68			.12				1.00
China Flat	Coast							.85	.12		.80	T.					T.	.02	T.		.25	.07	1.08	1.63	.36	T.	1.10	.95	.14			8.57
Chino	do																															
Cisco	Sacramento							2.65				.40	.85						.50	.10				1.20	.40	1.20							7.30
Claremont	Coast			.10										.44	.03	.13	.01		.03								.10					0.84
Clear Lake	Klamath																															
Cloverdale	Coast								.40			.08							.22		.01			.27	1.05			.32	.22			2.57
Colfax	Sacramento							T.		.80	.70	.10							.05							.80						2.45
Colgate	do								.13	.60		.04	.52						.51	.02				.01		.91						2.74
Colusa	do																															‡0.20
Corning	do								T.			.42													.20							0.77
Corona	Coast																															
Crockers	San Joaquin																															
Cuyamaca	Coast		.30	.30										1.40	.12	T.										.50						2.62
Daunt	San Joaquin			T.	.48								T.						.63							T.	.85					1.96
Davisville	Sacramento																															
Deer Creek	do								.90		.01	.48	.17					T.	1.00			T.	.01	.23	.24	1.57	.03					4.64
Delta	do																															
Denair	San Joaquin																									.04						0.04
Descanso	Coast			.26										.40	1.60																	2.26
Dinuba	San Joaquin												.15						.65							.45						1.25
Dobbins	Sacramento								.82	.01	.01	.55	.03						.50				.03	.01	.42	.46	T.					2.93
Dorris	Klamath																															
Downieville	Sacramento								.74	.05		.72	.45						1.11			T.	T.	.55	.30	1.28	.12					5.32
Dudleys	San Joaquin											.44	.76	.01					.27						T.	.90						2.38
Dunnigan	Sacramento																		10							.04						0.14
Dunsmuir	do							T.	.72	.49	.20	1.20	.03					T.	.63		T.	.04	.01	1.17	1.95	.90	T.	.40	1.75	.85		10.34
Durham	do								T.									.24						T.	.32			.10				0.66
Dyerville	Coast								.95			.85									.35				1.20	2.50		2.00				7.85
Edgewood	Klamath								.45	.08		.60						.35				.06		.51	.83	.55		.45	.33			4.21
Edison	San Joaquin																															
El Cajon	Coast			.28										.05	.43												.12					0.88
Electra	San Joaquin								.07			.25	.27						.25							1.03						1.87
Elsinore	Coast			.10										.04	.05																	0.19
Emigrant Gap	Sacramento							1.00	T.			.50	1.00					2.50														5.00
Escondido	Coast			.37										.15	.51												.24					1.27
Eureka	do							.40	.57		.93	.17						.69	.01		.25	.46	1.34	.85	.09	.04	.91	.14	.01		6.80
Fairmont	do																															
Farmington	San Joaquin												.04												.34							0.38
Felton	Coast																		.15							1.14						1.29
Firebaugh	San Joaquin											.12							.01							.21						0.34
Folsom	Sacramento								T.	.44		.02	.02						.24	.02					T.	.24						0.98
Fordyce Dam	do								1.25	.06		1.45	.72	.10				T.	.75				.05	1.20	.08	1.25						6.91
Fort Bragg	Coast							.70	.10		.20	.42						.51				.31	.81	1.24	.12		.31	.24	.06			5.02
Fort Ross	do																															
Fouts Springs	Sacramento								.54			.05						T.	.08				T.	.28	.67	.05		.20				1.87
Fredalba	Coast		.27											.55	.44	.30										.75						2.31
Fresno	San Joaquin											T.	.05						.06							.13						0.24
Fruto	Sacramento							T.				.07	.18						.10			T.				.10			.10			0.55
Galt	San Joaquin																	T.								.20						0.20
Georgetown	do								T.	.75		.08	.16						.65	.11				.02		1.47						3.24
Gilroy	Coast																		.09						.04	.31						0.44

TABLE 2.—*Daily precipitation for November, 1910. District No. 11*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Continued.																																
Glitz	Coast								2.06	.20	1.63	.73						.56	.02		.17	.73	.70	1.79	2.42			2.60	.63	.17		14.41
Glendora	do																															
Glenn Ranch	do			.03										.41		.03										.11					0.58
Glennville	San Joaquin				1.12								.09	.19					.42						.27	.24					2.33
Glenwood	Coast											T.							.12						.11	1.00					1.23
Gold Run	Sacramento								T.	.80		.10	.50						.80	T.				.15		1.30					3.65
Gonzales	Coast																		.05							.22					0.27
Grass Valley	Sacramento								.68	T.		.40						T.	.66			T.	.02	.01	.10	.84					2.71
Greenville	do								.49			.68	.28						.66				.07	.20	.91	1.15					4.44
Gridley	do																		.12							.25					0.37
Groveland	San Joaquin											.38	.58						.24							1.07					2.27
Guinda	Sacramento																															
Hanford	San Joaquin																															
Head Dam	Sacramento								1.19			.82	.05					.76						.10	.34	1.10					4.36
Healdsburg	Coast								.19			.09	.09					.15						.04	.45	.54	.12	.46			2.13
Hearst	do								1.00			.25						.40				.10	.10	1.40	1.30			1.00	.50		6.05
Heber	Desert	.02												.04																	0.06
Heien Mine	Coast								.90	.12		.18							.20		.12	.05		.95	4.22			.82	.67		8.23
Hesperia	Desert														.07											.02					0.09
Holcomb	Coast			.10											1.30	.70															2.10
Hollister	do												.06						.07						.04	.20					0.37
Hornbrook	do																															‡3.00
Hot Springs	San Joaquin				.40								.11	.05					.24						.28						1.08
Hullville	Coast								1.11			.17						T.	.32			.10	.05	1.42	1.70	.01		1.48	.65		7.07
Idyllwild	do			.46	.13									.20	1.05	.07											.49				2.40
Independence	Owens													.02																	0.02
Indio	Desert													.30																	0.30
Inskip	Sacramento								1.10			.87								.90		.04		1.40	2.75	1.58		.37	.62		9.63
Ione	San Joaquin																	.15	.65						.60						0.80
Iowa Hill	Sacramento																															
Isabella	San Joaquin																															
Jacksonville	do												.31						.11	.04						.68					1.14
Jamestown	do											.20	.75						.04						T.						0.99
Jenny Lind	do																		.06							.37					0.43
Johnsville	Mountain Lakes																															
Jolon	Coast																									.21					0.21
Julian	do																															
Kennedy Mine	San Joaquin																															‡1.30
Kennett	Sacramento								1.18	.14		.06	.09									.14		.82	1.56	1.08		.34	1.64		7.02
Kentfield	Coast																								.90	.06		.16			1.12
Kernville	San Joaquin																															
King City	Coast																		.04							.19					0.23
Knights Landing	Sacramento								T.	T.			.16						.08							T.					0.24
Knob	do																															
La Grange	San Joaquin											.07	.16						.04							.37					0.64
Lake Eleanor	do								T.			.17	.43						.62							.65					1.87
Lakeside	Coast		.25											.73													.15				1.13
La Porte	Sacramento								1.40	.09		1.20	.56					T.	1.14			.01	.04	1.40	1.50	2.00		.01	.03		9.38
Lathrop	San Joaquin																			.08											0.08
Laurel	Coast																		.20						.20	1.30					1.70
Laytonville	do								1.33			.31							.42				1.41	1.06	.40		1.71	1.45	.32		8.41
Le Grand	San Joaquin																									.73					0.73
Lemon Cove	do																	.26								.19					0.45
Letter Box	Sacramento																															
Lick Observatory	Coast									.03		.02							.39							.50					0.94
Livermore	do								T.			T.							.05			T.				.05					0.10
Lodi	San Joaquin										T.								.09							.12					0.21
Lone Pine	Owens													.08																	0.08
Long Camp	San Joaquin												1.20												.60						1.80
Long Valley	Mountain Lakes								.05			.11	.17					T.	.02			.05	T.	T.	T.	.76					1.60
Lordsburg	Coast														.42	.10											.13				0.65
Los Alamos	do			.15	.03																					.40					0.58
Los Angeles	do		.01	.08	T.								.03													.03					0.15
Los Banos	San Joaquin															T.			.08							.18					0.26
Los Burros Mine	Coast																															
Los Gatos	do											.07							.06						.02	.43					0.58
Los Vaqueros	do																															
Lowe Observatory	do				.42										.85											.30					1.57
Lytle Creek	do																															
McCloud	Sacramento								.65	.05	.18	1.20						.03	.45			.06	.31	1.35	2.25			1.35	.22	.14		8.24
Macdoel	Klamath								.87			.26	T.				.06		.18			.15	.07	.90	.46			.02				2.97
Madeline	Mountain Lakes								.40			.32	.15					T.	.30		T.	.02	T.	.30	.09	.36		.10				2.04
Magalia	Sacramento							.60	.20			.24						.66		T.	T.	T.	T.	1.10	4.83				.36			7.99
Mammoth Tank	Desert													.91																		0.91
Mariposa	San Joaquin												.50						.20							.56						1.26
Marysville	Sacramento												.15													.40						0.55
Mecca	Desert																															‡0.85
Melones	San Joaquin												.44							.35						.68						1.47
Menlo Park	Coast																							T.	.20							0.20
Merced	San Joaquin												.08							.09						.26						0.43
Merced Falls	do											.41						.03	.01						.32	.02						0.79
Mesa Grande	Coast		.23									.02	.29	1.06	.01												.58					2.19
Mill Creek (1)	San Joaquin								.26	.01		.42	.70						.42						T.		1.52					3.33
Mill Creek (2)	Coast																															
Mills College	do								.06			.05							.20						.02	.49						0.82
Milo	San Joaquin																		.58								.11					0.69
Milton (near)	do											.05					.03								.20							0.28
Modesto	do																		.04							.23						0.27
Mojave	Desert																															0.00
Mokelumne Hill	San Joaquin								.07			.34							.31						.77							1.49
Mono Ranch	Coast		T.	.20	.05							T.	.19	.10					T.													0.54
Montague	Klamath								1.26	.01	.23	.29						.16	.18			.10	.30	1.22	1.32			.33				5.40
Monterey	Coast																		.30						.11	.49						0.90
Monterio	San Joaquin												.02	.04					.08							.06						0.20
Montgomery Creek	Sacramento								.87	.43		.37	.18						.72				.50	1.60	.94	1.65			1.31			8.57
Monumental	Coast																															
Morena Dam	do																															
Mount Tamalpais	do								.14	.01		.03							.10				.06	.25			.04				0.63
Mount St. Helena	do											.55							.40			.55			.65			.40				2.55
Napa City	do								.15		.03	.04							.15						T.	.18		T.	.03			0.58
Napa (S. H.)	do								.07			.04							.12						.15			.01				0.39
Needles	Desert			.29	.04									.33	.73	.06																1.45
Nellie	Coast			.75	.40							1.04	.60													.85						3.64
Nevada City	Sacramento						.60					.57	.06					T.	.72			T.	.02	.03	.06	.70	.03					2.79

TABLE 2.—*Daily precipitation for November, 1910. District No. 11*—Continued.

Stations.	River basins.	Day of month.																											Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Continued.																																
Newcastle	Sacramento									.65									.45	.10						.40						1.60
Newhall	Coast												.71	.07																		0.78
Newman	San Joaquin											T.														.19						0.19
Nimshew	Sacramento								.53	.02		.35	.26					.02	.53		.03	.06	.55		2.03	.87		.15	.12			5.52
North Bloomfield	do											T.	.57						.48							.43						1.48
North Fork	San Joaquin								.11	.02		.10						.07	.03			.01	.06	.18	.45			.18	.15			1.36
North Lakeport	Coast												.06						T.							.33						0.39
Oakdale	San Joaquin												.06	1.20												.02						1.51
Oak Grove	Coast			.23					.08		.01	.07							.16						.26	.07		T.				0.65
Oakland	do									.19	.05															.68	.03					6.95
Oakville	do											T.	.12	.31	.01	.01			T.						.04	.09						0.77
Oceanside	do		.03	.16	T.								.28	T.												.02						0.37
Ojai Valley	do		.01	.05		.01			T.											T.					.27		.44	.01			1.02
Orland	Sacramento							.01			.10	.06						.13														11.60
Orleans	Klamath							1.65	.03	.04	1.00	.02						.68	.10	.19	.51	.48	2.17	1.85	.25		1.00	1.40	.23			0.83
Oroville	Sacramento										.02												T.		.81	T.						0.45
Ozena	Coast						.20																					.25				0.60
Palermo	Sacramento											.20							.20						.20							0.66
Palm Springs	Desert			.16											.35												.15					0.21
Parkfield	Coast																									.21						0.28
Pasadena	do			.06									.14	.06		.02			.05							.10						0.17
Paso Robles	do			.02															.13							.04		.33	.02			1.91
Peachland	do								.22	.02		.03	.02									.01	T.	.11	.98							
Penstock Camp	San Joaquin																															
Peyton	Sacramento												22						.14							.68						1.04
Phoenix Dam	San Joaquin								.77		.70								.66					.07	2.10							4.30
Pilot Creek	Sacramento												.05	.17													.22					0.61
Pine Crest	Coast			.13	.04																											
Pittville	Sacramento									.52		.09	.12						.42							1.08						2.23
Placerville	do								.02	.02	T.	.07							.06					.02	.17	.08						0.44
Point Lobos	Coast			.13	.02		.02	.01				.01		.22	.17	.01		T.						.02	.01		.07					0.69
Point Loma	do		.01						.23	.03		.03						.01	.15			.02	.03	.24	.43			T.				1.18
Point Reyes	do												11													.31						0.42
Pollasky	San Joaquin										.20	.03						.05							.08							0.36
Porterville	do																		.09							.17						0.26
Priest Valley	Coast												.50	.45				.70						.13	.78	.92						3.82
Quincy	Sacramento								.34		.01	.46	.10					.03	.15				.02	T.	1.64			.12				2.78
Red Bluff	do								.25			.07																				2.96
Redding	do								.46			.13	.04				T.	.06	.68			T.	.12	.48	T.		.07	.99				0.48
Redlands	Coast			.13	.01									.01	.03	T.			.02								.28					0.47
Reedley	San Joaquin												15						.15							.17						0.72
Represa	Sacramento								.48									.24														0.65
Rialto (near)	Coast												.10	.20	.03	.32			.08										T.			0.08
Rio Vista	Sacramento																															0.40
Riverside	Coast			.08									.04		T.											28						0.60
Rocklin	Sacramento								10									30							20							6.85
Rohnerville	Coast		T.						72			1.06						20	.61			23	.20	.70	2.13	T.		1.00	T.			0.17
Sacramento (1)	Sacramento								.01			.01							.09						.06							0.26
Sacramento (2)	do								.21		T.	T.							.15				T.		.08	.02						1.40
St. Helena	Coast								.28															.20	.11	.61		.04	.16			0.32
Salinas	do																.08									.24						0.54
San Bernardino	do			.07										.08	.01	.10			.02							.02						0.40
San Diego	do		.02	.04									.14	.16	.02													T.				0.48
San Francisco	do								.03	.03		.06		1.85	.30	.05			.09					.02	.25				.53			2.94
San Jacinto	do			.18	.03														.08						.18	.02						0.28
San Jose	do											T.												.02	.32							0.54
San Leandro	do							.01	.04		.02	.01						12	.02						T.	.23						0.27
San Luis Obispo	do		T.	.02	T.														.12						.02	.15						0.29
San Mateo	do																		T.							.20						0.20
San Miguel	do			T.																												
San Miguel Island	Ocean																															‡1.40
Sanger	San Joaquin												.05	.44	.20	.14										.42	.42					1.89
Santa Ana River	Coast			.22									04													.21						0.33
Santa Barbara	do		T.		.08														.06							.20						0.30
Santa Clara	do											.04													.20	.20						0.70
Santa Cruz	do																	.30														
Santa Margarita	do																															0.15
Santa Maria	do			.15																						T.						0.49
Santa Monica	do		T.	.04									T.	.45												.06	.01	.23	.01			1.76
Santa Rosa	do								.25	.08		.04	.03						.22			.02	T.	.10	.71	.06						0.64
Sausalito	do									.22								.11								.31						0.33
Selma	San Joaquin												.17						.10							.06						0.87
Seven Oaks	Coast													.75	T.											.12						5.00
Shasta	Sacramento								.84															1.87		.91	.98	.27	.13			
Shingle Springs	San Joaquin												.29	T.		.10			T.							.10						0.79
Sierra Madre	Coast		T.	.05	.25				.40			T.	.30						.20						.22	.75						1.87
Sierraville	Mountain Lakes																															
Sisquoc Ranch	Coast								.47	.60	.66	1.26	.15						.48		.52		.80	1.53	1.32			1.12	.18			9.09
Sisson	Sacramento																									.27						0.27
Soledad	Coast											.77	.55						.13							.41						1.86
Sonora	San Joaquin								.08			.01							.08			.02		.05	.34			T.				0.58
South East Farallones	Ocean												.01						.05							.26						0.32
Spreckles	Coast													.88	.32	.15			T.								.84					2.19
Squirrel Inn	do			T.					.37	.20		.15	.70						.55	.20			T.	.23	1.05	2.80			.15			6.40
Stirling City	Sacramento																		.08							.09						0.17
Stockton (S. H.)	San Joaquin																															
Storey	do																		.30													0.30
Suisun	Sacramento																		.88								.32					2.50
Summerdale	San Joaquin											.12	.98		.98				.50					1.16		1.90							5.46
Summit (1)	Sacramento								.22	.20		.98	.50																			0.00
Summit (2)	Coast													.19	.11				T.							.29						0.68
Surrey	do		T.	.09								.17	.16						.28						.40	.72						1.73
Susanville	Mountain Lakes								.25	.10		.65	.50	.30					.50					.30		1.60						4.20
Tamarack	Sacramento													.24	.12																	0.76
Tehachapi	San Joaquin				.40								.28						.12							.38						0.88
Tehama	Sacramento							.10					.32						.17							.18						0.67
Three Rivers	San Joaquin																		.70	.30					.19	1.60						4.22
Towle	Sacramento							T.		.70		.10	.63					.05	T.													0.05
Tracy	San Joaquin													.37					T.							.04						0.41
Tulare	do													.06	T.		.10										.06				0.29
Tustin (near)	Coast				.07							.15							.30			.03	.01	.50	.70	T.	.49	.30	.03			2.51
Ukiah	do																									.18						0.82
Upland	do			.03										.41		.20			.15			T.	T.	.31	.62			.38	.08			1.84
Upper Lake	do								.19			.11																				

TABLE 2.—*Daily precipitation for November, 1910. District No. 11*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
California—Continued.																														
Upper Mattole	...do																													
Vacaville	Sacramento											.09						.04							.03						0.16
Valley Springs	San Joaquin											T.							.10	.01						.49					0.60
Ventura	Coast																														
Visalia	San Joaquin																														
Warner Springs	Coast		.15										.05	1.20	.17											.20					1.77
Wasco	San Joaquin																	.19													0.19
Watsonville	Coast																	.28						.08	.32						0.68
Weaverville	Sacramento							.58			.42								.40				.15	.95	.40	.33		.77	.29			4.29
Weitchpec	Klamath							.16	3.19	.04	.46	.73					.02	.28	.49		.48	1.64	1.81	3.23	1.35			3.12	1.61	.13		18.74
West Branch	Sacramento								.77			.80	.31					.03	.70			.03	.20	.87	2.10	1.61		.06	.26			7.74
Westley	San Joaquin																		.10							.16					0.26
West Point	...do																														
West Saticoy	Coast																									.02					0.02
Wheatland	Sacramento								.06			.24							.14				T.	.21							0.65
Willows	...do								T.			.16	.02				T.		.25		T.				.10			.12			0.65
Woodleaf	...do																														
Yosemite	San Joaquin											.20	.36						.48							.33					1.37
Yucaipe	Coast																														

MONTHLY WEATHER REVIEW.

NOVEMBER, 1910.

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 11, California.*

California.

Date.	Lakeview, Oreg.		Altures.		Barstow.		Branscomb.		Brawley.		Colusa.		Eureka.		Fresno.		Independence.		Los Angeles.		Mount Tamalpais.		Nevada City.		Portersville.		Red Bluff.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1			75	22	86	53	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
2			80	24	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
3			80	25	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
4			80	15	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
5			80	17	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
6			75	25	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
7			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
8			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
9			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
10			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
11			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
12			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
13			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
14			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
15			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
16			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
17			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
18			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
19			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
20			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
21			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
22			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
23			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
24			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
25			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
26			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
27			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
28			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
29			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
30			80	31	86	54	82	48	84	52	78	33	66	46	78	48	76	36	72	54	68	48	72	46	74	46	72	46
Mns.			82.4	26.1	77.4	39.9	59.0	36.8	78.3	35.4	70.1	38.3	56.3	44.9	66.7	43.1	62.5	33.6	69.0	51.6	55.0	43.3	62.9	53.9	68.1	42.3	62.3	45.0

California.

Date.	Redlands.		Sacramento.		San Diego.		San Francisco.		San Jose.		San Luis Obispo.		Santa Barbara.		Santa Rosa.		Sisson.		Stockton.		Summit.		Susanville.		Yosemite.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	81	47	78	44	67	56	76	52	68	48	72	54	68	54	74	48	64	34	68	45	68	31	64	31	70	32
2	77	44	78	46	74	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
3	80	37	71	34	76	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
4	72	47	72	41	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
5	82	46	74	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
6	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
7	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
8	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
9	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
10	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
11	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
12	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
13	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
14	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
15	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
16	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
17	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
18	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
19	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
20	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
21	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
22	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
23	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
24	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
25	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
26	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
27	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
28	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
29	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
30	84	46	78	46	68	56	68	51	68	48	72	54	68	54	74	48	66	32	68	45	68	31	64	31	70	32
Mns.	71.4	44.6	63.5	43.0	65.6	51.8	60.3	49.4	64.9	41.6	67.0	46.9	63.3	47.9	63.3	40.5	61.3	31.5	59.5	42.3	49.4	28.8	52.6	29.9	59.3	28.6

Climatological Data for November, 1910.

DISTRICT NO. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor.
THEODORE F. DRAKE Acting District Editor.

GENERAL SUMMARY.

Although temperatures for the month averaged slightly above the normal, there was a marked deficiency of sunshine. The weather was unusually stormy, and the month was the cloudiest November on record, the sunshine recorded being only about 12 per cent of the possible amount. The precipitation was quite well distributed throughout the month, there being no day without precipitation in some portion of the district. The snowfall in the higher levels in the interior, particularly in Idaho, Montana, and Wyoming, was considerably above the normal, and the greater portion remained on the ground, well packed, at the close of the month. The high winds along the coast caused no known damage to shipping; and although the heavy rains caused the streams to rise rapidly, and in some instances to slightly overflow their banks, no damaging floods occurred. Transportation, which had been discontinued on the upper Willamette and the Snake Rivers on account of low water, was resumed. Railroad traffic was unimpeded, and construction work proceeded without material interruption.

TEMPERATURE.

The mean temperature, as determined from the records of 229 stations, was 39.9°, which is 0.2° above the district average. The mean temperatures ranged between 28.6° at Snake River, Wyo., and 52.2° at Toledo, Oreg. The warmest sections were those west of the Cascade Mountains, and in the bottom lands of the Columbia River system, where temperatures averaged 40° and above. Mean temperatures below 32° occurred at some stations in extreme eastern sections. Throughout the greater portion of Oregon and in central Washington mean temperatures were generally below the normal.

The highest temperatures occurred generally during the first two days of the month, and the lowest were usually recorded during the second decade. The highest recorded temperature was 83° on the 1st at La Grande, Oreg., elevation 2,784 feet, and the lowest was −12° on the 27th at Salmon, Idaho, elevation 4,040 feet.

PRECIPITATION.

The average precipitation, as determined from the records of 337 stations, was 6.42 inches, which is 1.95 inch above the average for the district. Light rains occurred locally in most sections during the first three days of the month; and during the two particularly stormy periods, from the 6th to the 12th and from the 17th to the 30th, precipitation was quite general throughout the district. The heaviest precipitation occurred west of the Cascade Mountains in Oregon and Washington, in the Blue Mountains in northeastern Oregon, and in northern Idaho and central western Montana. In elevated sections in the eastern portion of the district the heavy precipitation of the last half of the month occurred in the form of snow, which, on account of the low temperatures that obtained, nearly all remained on the ground at the close of the month, and was packed solidly.

The greatest monthly precipitation was 37.02 inches at Glenora, Oreg., in the Coast drainage area, and the least was 0.43 inch at Buena Vista, Oreg., in the Snake River drainage area. The greatest 24-hour rainfall was 7 inches on the 20th at Glenora, Oreg., and the second greatest was 5.50 inches on the 21st at Goat Lake, Wash., in the Puget Sound drainage area.

THE RIVERS.

Owing to the heavy rains during the latter part of the month the rivers rose rapidly from the 25th to the 30th, the highest stages at most stations being recorded on the 29th or 30th. The mean stages were all higher than those for October, with the exception of Northport and Wenatchee, at which points they were slightly lower.

The Columbia River averaged 1 foot above the normal for the month, being 1.5 foot above at both The Dalles and Umatilla. Compared with the October mean stage the average was 1.7 foot higher.

The Willamette River averaged 0.6 foot above the normal for November, being 1 foot above at Portland and 0.2 foot above at Salem. The Columbia River being comparatively low, the water in the lower Willamette ran out rapidly, thus preventing a higher stage being experienced at Portland than might otherwise have been expected.

The Snake River average was exactly normal, the highest stage recorded being 5.5 feet at Riparia on the 23d and the lowest 1.2 foot at Lewiston on the 7th.

A heavy rainfall at Pendleton on the 20th, accompanied by a warm wind which melted the snow on the foot hills, caused the Umatilla to rise rapidly and reach a higher stage than at any other time during the season.

On November 14 the steamer *Pomona* made the trip from Portland to Corvallis. This is the first trip of the kind to be made since June, owing to the unusually low stage of the Willamette during the summer. Freight shipments have accumulated at all points along the river, and officials of the navigation company are anxious to keep the craft in continuous service.

The steamers *City of Eugene* and *Gray Eagle* are once more plying between Salem and Oregon City, transporting pulp wood for the paper mills, after an enforced idleness since last June.

The Scandinavian-American Dredging Co. has decided to begin the work of extracting gold from the sands of the Rogue River by means of a mammoth new dredge, which is now ready to be put to work. The gravel in the river bed contains a large percentage of black sand, which carries a considerable amount of gold. The company reports that favorable results have been obtained with a dredge of small capacity during the last two years.

With the first cargo of freight sent to Lewiston by the water route since the early part of July, the steamer *Inland Empire* left Portland for the Snake River metropolis on the 29th. The Snake River is now at a good boating stage and a regular service to Lewiston will be maintained. This will include all river traffic between Celilo and points on the upper Columbia River.

MISCELLANEOUS PHENOMENA.

Thunderstorms occurred in many localities on the 21st, on which date hail was also reported at several stations in Montana, Idaho, and Oregon. Solar and lunar halos were recorded by many observers on one or more dates, many being recorded on the 13th. Sleet occurred at a few places on the 21st and 25th, and there was fog in many localities on the 1st and 2d, 13th to 16th, and 29th to 30th. Auroral displays were reported at Fall City, Oreg., on the 18th and at Paulina, Oreg., on the 2d.

The prevailing winds were from the southwest, and maximum velocities were recorded as follows: North Head, Wash., 84 miles from the southeast on the 22d; Tatoosh Island, Wash., 72 miles from the southeast on the 7th; Port Crescent, Wash., 46 miles from the southwest on the 22d; Seattle, Wash., 40 miles from the southwest on the 23d, and Walla Walla, Wash., 32 miles from the south on the 21st.

TABLE 1.—*Climatological data for November, 1910. District No. 12, Columbia Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Montana.																			
Anaconda	Deer Lodge	5,300	9	32.6	.....	59	2	0	27	31	2.22	+ 1.45	.....	18.1	....	5	8	17	.....	C. D. Demond.
Bison Mountain	Powell	7,240	1	.....	.....	.....	.....	.....	.....	.....	3.30	.....	0.48	39.0	15	7	12	11	.....	C. H. Anderson.
Butte	Silver Bow	5,716	15	33.6	− 0.1	58	2	2	27	25	1.62	+ 0.85	0.40	12.2	7	9	5	16	nw.	J. R. Wharton.
Columbia Falls	Flathead	3,100	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. I. M. Kennedy.
Como§**	Ravalli	.....	2	36.4	.....	64	2	13	26	28	3.70	.....	0.49	24.0	18	3	5	22	.....	Hiram Platt.
Dayton	Flathead	2,800	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Charles Frost.
East Anaconda§	Deer Lodge	5,500	5	31.1	.....	58	2	5	27	29	2.37	.....	1.10	16.3	10	5	8	17	sw.	C. D. Demond.
Fortine	Lincoln	2,975	4	33.2	.....	53	3	11	26	27	1.67	.....	0.42	6.7	11	5	3	22	w.	Mike Petery.
Hamilton	Ravalli	3,575	7	36.4	.....	64	2	9	26	33	2.11	.....	0.51	10.5	8	4	13	13	s.	Bitter Root Valley Ir. Co.
Hat Creek	Powell	6,000	1	.....	.....	.....	.....	.....	.....	.....	2.38	.....	0.44	25.0	15	4	8	18	w.	M. K. Landreth.
Kalispell	Flathead	2,965	11	34.9	+ 2.9	56	2	18	26	21	1.68	− 0.22	0.36	7.4	13	2	5	23	w.	U. S. Weather Bureau.
Lost Creek	Deer Lodge	5,200	.....	.....	.....	.....	.....	.....	.....	.....	2.09	.....	0.80	18.5	6	11	7	12	n.	Frank Henault.
McGinnis Meadows	Lincoln	.....	.....	33.1	.....	62	2	11	15	33	3.07	.....	0.61	6.2	15	3	3	24	se.	H. L. Beebe.
Missoula	Missoula	3,225	32	36.0	+ 3.7	60	2	11	27	27	2.35	+ 1.00	0.40	10.2	15	.....	.....	.....	sw.	U. S. Weather Bureau.
Ophir	Powell	8,800	1	.....	.....	.....	.....	.....	.....	.....	2.66	.....	0.43	.....	11	4	2	24	w.	E. S. Wilton.
Ovando	.....do	4,207	10	30.0	− 0.1	60	2	10	16	30	5.34	+ 3.30	1.00	41.5	18	0	30	0	w.	S. B. Muchmore.
Philipsburg	Granite	5,275	7	33.8°	.....	63	2	− 3	27	32°	2.14	.....	0.90	16.4	10	6°	6°	15°	n.	G. T. Bramble.
Plains	Sanders	2,475	12	35.4	+ 3.0	64	2	15	26	22	1.90	+ 0.53	0.80	5.0	5	6	0	24	sw.	M. H. Pierce.
Pleasant Valley	Flathead	3,500	3	32.6	.....	61	2	− 5	26	38	3.70	.....	0.65	15.0	15	3	13	14	.....	A. D. Stillman.
Polson	.....do	2,920	2	37.2	.....	65	2	16	28	27°	2.54	.....	0.90	7.0	6	.....	.....	.....	.....	F. P. Brown.
St. Ignatius	Missoula	2,700	4	37.1	.....	67	2	13	26†	29b	1.99	.....	0.40	13.9	13	2	0	28	nw.	U. S. Reclamation Service.
St. Regis	.....do	2,650	2	35.8	.....	58	2	15	27	29	5.25	.....	0.71	10.1	15	1	22	7	ne.	R. D. Lee.
Saltese	.....do	3,600	6	.....	.....	.....	.....	.....	.....	.....	10.17	.....	1.98	38.0	14	3	0	27	w.	E. K Tarbox.
Snowshoe	Lincoln	4,500	4	29.6	.....	51	2	12	27	20	12.17	.....	2.64	49.3	21	5	2	23	w.	J. C. Riter.
Troy	.....do	1,880	14	39.2	+ 3.3	60	2†	20	16	28	6.12	+ 1.68	1.69	10.0	16	5	3	22	s.	W. E. Milnor.
Upper Lake McDonald	Flathead	3,200	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. F. Liebig.
Willow Glen Stk. Frm.§ §§	Deer Lodge	.....	1	32.9	.....	60	10	5	28	30°	1.97	.....	0.50	15.0	10	7	4	19	sw.	G. E. Luce.
Wyoming.																				
Afton	Uinta	6,200	6	34.8	+ 3.7	67	3	− 5	27	42	0.82	+ 0.04	0.25	6.5	6	11	4	15	.....	A. U. Call.
Alta	.....do	7,000	1	31.4	.....	57	11	−10	27	39	2.03	.....	0.40	7.4	11	9	3	18	sw.	Mrs. Lucy Brown.
Bedford	.....do	5,900	10	.....	.....	61	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	w.	C. G. Heiner.
Snake River	Yellowstone Park	7,000	4	28.6	.....	54	2	−11	27	35	4.60	.....	0.90	38.0	13	9	2	19	nw.	U. S. Army.
Nevada.																				
San Jacinto	Elko	.....	5	34.4f	.....	57	5	15	26	29	0.86	.....	0.27	2.5	6	13	5	12	sw.	Moses Jones.
Utah.																				
Standrod	Boxelder	.....	6	38.6	.....	66	2	10	27	34	0.94	.....	0.30	0.7	10	8	2	20	.....	T. B. Jones.
Idaho.																				
Albion	Cassia	.....	9	37.4	.....	71	2	11	4†	48	1.64	.....	0.53	T.	6	....	....	....	w.	G. A. Axline.
Almo	.....do	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. L. Eames.
American Falls	Oneida	4,341	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. H. Barber.
Blackfoot	Bingham	4,503	15	37.6	+ 3.1	68	2	10	4†	47	0.99	+ 0.16	0.44	0.5	10	4	12	14	sw.	E. A. Dowd.
Blackfood Dam	.....do	.....	2	32.6	.....	60	2†	− 8	27	38	1.20	.....	0.33	8.5	14	8	9	13	sw.	N. W. Irsfield.
Bock's Ranch	Elmore	3,500	.....	.....	.....	.....	.....	.....	.....	.....	5.10	.....	1.10	7.8	15	.....	.....	.....	.....	William Bock.
Bogus Creek	Boise	4,200	.....	.....	.....	.....	.....	.....	.....	.....	5.68	.....	0.92	7.9	18	6	5	19	.....	F. P. Ingraham.
Boise	Ada	2,739	25	42.0	+ 2.4	72	2	20	26	34	2.53	+ 1.67	0.50	3.0	16	5	4	21	se.	U. S. Weather Bureau.
Bonners Ferry	Bonner	1,850	.....	35.8	.....	52	4	18	13†	30	.....	.....	0.88	6.0	11	4	2	24	sw.	W. H. Heideman.
Boulder Mine	Boise	4,800	2	.....	.....	.....	.....	.....	.....	.....	7.53	.....	1.12	22.2	16	9	3	18	.....	Patrick Moriarty.
Buhl	Cassia	3,800	5	43.8°	.....	71	2†	18	27	44°	.....	.....	.....	4.0	7	.....	.....	.....	.....	H. J. Idema.
Burke	Shoshone	4,082	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Alvin Hall.
Caldwell	Canyon	2,372	6	40.4	.....	71	2	16	5	43	2.15	.....	0.33	4.0	14	3	9	18	e.	Prof. Wm. J. Boone.
Camas	Fremont	4,815	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Edna J. Faulkner.
Cambridge	Washington	2,651	14	36.7	− 0.9	70	1	11	27	43	5.67	+ 3.14	0.74	11.5	15	.....	.....	.....	w.	Chas. H. Shepherd.
Cedar Creek Dam	Twin Falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Collins.
Chesterfield	Bannock	5,424	15	34.0b	+ 3.4	69	10	0	27	50b	0.81	+ 0.03	0.23	1.0	6	.....	.....	.....	sw.	Chas. S. West.
Coeur d'Alene	Kootenai	2,157	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jos. T. Scott.
Cottonwood Creek	Boise	4,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.8	....	14	2	14	.....	Frank Hedrick.
Crawford	.....do	4,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Gertrude Kerby.
Culdesac	Nez Perce	1,520	3	42.2	.....	65	2	30	15†	29	4.95	.....	1.10	.....	9	2	4	24	.....	R. R. Richmond.
Deary	Latah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. M. Call.
Dent	Nez Perce	1,350	6	40.4	.....	55	2†	28	27	20	5.83	.....	1.37	3.8	12	3	12	15	.....	Emil Schuessler.
Driggs	Fremont	6,097	3	32.8	.....	60	11	− 7	27	32	1.45	.....	0.65	5.0	8	7	4	19	sw.	Walter H. Durrant.
Edie	.....do	.....	2	30.3	.....	62	10	5	27	35	0.48	.....	0.20	2.0	3	12	9	9	s.	Geo. B. Edie.
Edwardsburg	Idaho	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Edwards.
Emmett	Canyon	2,350	4	40.8	.....	70	2	16	4	42	3.05	.....	0.51	3.0	14	7	5	18	.....	C. P. Kar.
Flowers	Blaine	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Forest Service.
Forney	Lemhi	.....	13	33.8	+ 2.6	54	25	−10	27	41	0.91	− 0.86	0.55	5.7	5	7	2	21	sw.	M. B. Merritt.
Garden Valley	Boise	3,600	4	.....	.....	.....	.....	.....	.....	.....	6.52	.....	1.25	10.5	14	4	3	23	.....	Mrs. Gertrude M. Ross.
Garnet	Elmore	2,575	11	45.2	+ 1.3	76	2†	19	26	40	.....	.....	0.20	.....	8	9	0	21	e.	Asa A. Kenison
Glenns Ferry	.....do	2,569	3	42.8	.....	74	2	12	5	50	1.76	.....	0.57	2.5	11	8	2	20	.....	I. E. Perkins.
Gooding	Lincoln	3,572	2	39.5	.....	70	2	14	4	42	1.72	.....	0.73	2.9	12	6	5	19	w.	John Krall, jr.
Grand Forks	Shoshone	3,000	.....	35.2	.....	59	2	21	26	25	13.34	.....	2.40	18.1	19	7	1	22	e.	Henry Kottkey.
Grandview	Owyhee	.....	2	42.0	.....	73	2	14	5	48	1.28	.....	0.45	.....	9	8	3	19	nw.	N. G. Massey.
Grimes Pass	Boise	5,200	2	.....	.....	.....	.....	.....	.....	.....	7.34	.....	1.00	21.9	20	.....	.....	.....	.....	Joseph M. Clarke.
Guffey	Owyhee	2,381	2	44.0	.....	75	2	20	26	39	1.73	.....	0.41	T.	13	7	15	8	e.	Fred Perry.
Hailey	Blaine	5,347	7	34.6	.....	61	2	4	27	32	2.28	.....	0.44	14.9	13	8	7	15	sw.	U. S. Forest Service.
Hotspring	Owyhee	2,572	5	45.0	.....	74	3	19	5†	42	1.55	.....	0.50	5.0	7	8	8	14	.....	J. M. Waterhouse.
Idaho City	Boise	4,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Emma L. Hammer.
Idaho Falls	Bingham	4,742	16	37.0	+ 5.0	62	2	10	27	35	1.09	0.00	0.40	1.5	7	10	12	8	ne.	Dr. T. M. Bridges.
Indian Valley	Washington	2,999	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. E. Henke.
Irwin	Bingham	6,500	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Eva Johnston.
Kellogg	Shoshone	2,305	....	37.3	.....	62	2	23	26	27	5.20	.....	0.96	7.5	16	0	0	30	.....	W. McM. Huff.
Kirkham	Boise	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.10	.....	1.40	18.0	6	3	7	20	.....	Mrs. Josie B. West.
Kooskia	Idaho	1,261	1	44.3	.....	65	2	28	25	32	5.88	.....	1.46	0.0	18	0	2	28	.....	U. S. Forest Service.
Lakeview	Bonner	2,250	14	37.6	− 0.2	56	2	24	26	22	5.89	+ 1.20	1.30	8.0	15	2	0	28	sw.	E. D. Faust.
Landore	Washington	5,300	.....	31.2	.....	54	2	7	26	25	7.42	.....	1.39	41.2	17	6	3	21	.....	Mrs. Emma L. Brown.
Lewiston	Nez Perce	757	17	42.9	+ 2.0	66	2	30	14	25	3.51	+ 2.19	0.91	T.	18	2	3	25	e.	U. S. Weather Bureau.
Little Camas	Elmore	5,000	2	.....	.....	.....	.....	.....	.....	.....	5.27	.....	1.39	19.5	13	6	5	19	w.	Solon McCoy.
Long Gulch	.....do	4,500	2	.....	.....	.....	.....	.....	.....	.....	5.16	.....	0.80	15.0	18	6	8	16	.....	Mrs. Elizabeth A. Hjort.
Loon Creek	Custer	6,000	....	30.8	.....	59	2	− 10	27	39	.....	.....	0.67	.....	17	7	5	18	w.	U. S. Forest Service.
Lost River	Blaine	5,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Mary L. Lemon.
Lowry	Owyhee	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. D. Winter.
McCall	Boise	5,025	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Will Newman.
Mackay	Custer	5,897	3	34.4	.....	60	1†	15	21	34	0.58	.....	0.24	.....	4	7	17	6	nw.	U. S. Forest Service.
Meadows	Washington	3,950	8	33.8	.....	55	1	4	27	35	6.85	.....	1.21	32.0	20	3	8	19	.....	Chas. A. Hackney.
Mesa	.....do	3,275	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Elias Nelson.
Middle Fork	Idaho	1,250	.....	.....	.....	68j	4	.....	.....	.....	.....	.....	1.60	.....	.....	.....	.....	.....	.....	Joseph McGhee.
Milner	Cassia	4,200	7	40.3	.....	70	2	16	26†	40	2.24	.....	0.45	2.0	11	8	14	8	w.	J. H. Henry.

TABLE 1.—*Climatological data for November, 1910. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Idaho—Continued.																			
Moscow	Latah	2,748	18	38.0	+ 0.2	58	2	25	26†	20	3.94	+ 0.65	0.77	2.4	11	2	7	21	se.	University of Idaho.
Mountainhome	Elmore	3,150	5	40.2	.....	71	2	10	26	46	2.41	.....	0.64	5.0	12	7	20	3	.....	Mrs. Ellen Manion.
Murtaugh	Cassia		4	38.0[b]	.....	71	2	10	27	47[b]	1.73	.....	0.42	4.5	9	.....	.....	.....	w.	J. E. Steinour.
Nez Perce§	Nez Perce	3,182	2	36.3	.....	65	4	12	26	41	4.39	.....	0.80	.....	16	5	0	25	.....	P. Mitchell.
Oakley	Cassia	4,700	18	40.5	+ 1.6	72	3	15	26†	42	0.80	0.00	0.30	T.	6	14	11	5	s.	John Adams.
O'Hara Bar	Idaho	1,400	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. D. Agnew.
Orofino	Nez Perce	1,027	6	39.8	.....	65	2	25	27	28	6.50	.....	0.84	4.5	21	1	18	11	.....	Geo. Alteneder.
Payette	Canyon	2,159	20	40.4	− 0.8	67	2	17	3†	44[a]	2.72	+ 1.32	0.39	3.0	15	6	4	20	n.	E. F. Allen.
Peaceful Valley§	....do	2,380	.....	40.1[c]	.....	66	7†	15	26	38[a]	1.79	.....	0.50	2.5	10	.....	.....	.....	se.	J. W. Newton.
Pebble	Bannock	5,277	2	34.4	.....	61	10	4	27	45	1.95	.....	0.80	3.9	11	10	10	10	sw.	Mrs. Fannie Say.
Pierson	Custer	6,900	.....	30.8	.....	60	1	− 8	26	49	4.44	.....	1.20	14.0	7	14	1	15	s.	David P. Clarke.
Pine	Elmore	4,100	.....	.....	.....	.....	.....	.....	.....	.....	4.01	.....	1.00	22.0	9	8	6	16	.....	Mrs. Jennie Potter.
Placerville	Boise	4,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James'McDevitt.
Pleasant Valley	Ada	3,000	3	40.3	.....	73	2	10	26	35	2.41	.....	0.47	5.0	11	8	0	22	se.	C. E. Friedrich.
Pocatello	Bannock	4,483	11	40.0	+ 3.7	66	2	15	27	33	1.32	+ 0.77	0.47	1.4	9	5	8	17	se.	U. S. Weather Bureau.
Pocatello Nursery	....do	5,396	3	33.4[c]	.....	62	4†	2	27	52[a]	1.84	.....	0.41	4.0	9	.....	.....	.....	.....	Mrs. Anna M. Wrensted.
Poplar	Bingham	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Stanley Bybee.
Porthill	Bonner	1,655	22	35.8	+ 2.0	51	3†	21	15	21	3.91	+ 0.57	0.91	.....	18	8	0	22	.....	H. A. French.
Powers Ranch	Boise	4,300	.....	.....	.....	.....	.....	.....	.....	.....	4.76	.....	1.01	.....	13	12	0	18	.....	Mrs. Mary French.
Pyle Creek	....do	3,100	2	.....	.....	.....	.....	.....	.....	.....	7.77	.....	1.87	18.5	13	5	8	17	.....	Walter L. Cole.
Rattlesnake Creek	Elmore	4,000	.....	.....	.....	.....	.....	.....	.....	.....	5.45	.....	0.92	9.7	18	3	5	22	w.	Richard M. Green.
Richfield	Lincoln	.....	.....	37.2[b]	.....	70	2	13[a]	5	44[a]	1.98	.....	0.72	4.1	12	9	8	13	w.	C. H. Fitch.
Roseworth	Twin Falls	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.19	.....	0.47	5.5	9	2	11	17	nw.	D. B. Hartwell.
Ruby Creek	Boise	4,400	.....	.....	.....	.....	.....	.....	.....	.....	6.95	.....	1.35	14.3	18	2	8	20	w.	O. A. Hatter.
Rupert	Lincoln	4,294	4	39.4	.....	72	21	14	5	48	1.38	.....	0.34	0.2	11	11	8	11	sw.	Will Parry.
St. Maries	Kootenai	2,263	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Turnbull.
Salmon	Lemhi	4,040	5	34.0	.....	57	2	− 12	27	39	2.38	.....	0.50	18.5	13	8	6	16	nw.	E. K. Abbott.
Salmon River Dam	Twin Falls		3	40.7	.....	72	2	13	26†	37	1.77	.....	0.35	5.5	12	5	9	16	n.	Arch M. Gilbert.
Sandpoint	Bonner	2,086	.....	36.4	.....	52	4†	17	26	29	7.29	.....	1.64	.....	12	1	7	22	s.	E. H. Edgertond.
Sheep Hill	Boise	5,000	2	.....	.....	.....	.....	.....	.....	.....	7.49	.....	1.49	18.0	17	.....	.....	.....	.....	Clifford M. Garner.
Shoshone	Lincoln	3,968	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. A. Truman.
Silver City	Owyhee	6,280	3	.....	.....	.....	.....	.....	.....	.....	4.18	.....	0.90	10.5	12	8	7	15	s.	A. D. Bradfield.
Smith Prairie	Elmore	5,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. W. Newell.
Smith Ranger Station	Bonner	1,080	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. D. Crittenden.
Soldier Creek	Blaine		.....	32.8	.....	62	2	2	27	36	4.95	.....	1.19	30.3	14	9	4	17	w.	J. E. Minear.
Springfield	Bingham	4,420	2	37.4	.....	68	2	8	4	47	1.51	.....	0.48	1.5	6	2	16	12	sw.	Mrs. W. A. Edwards.
Sugar§	Fremont		4	33.9	.....	61	2	8	27	37	1.23	.....	0.32	6.0	7	7	7	16	sw.	Arthur Cutting.
Sunnyside	Elmore		2	40.2	.....	71	2	14	26	43	2.75	.....	0.52	3.5	11	.....	.....	.....	se.	E. A. Wilmot.
Tripod Mountain	Boise	4,300	2	.....	.....	.....	.....	.....	.....	.....	7.18	.....	1.24	16.0	17	4	6	20	.....	Mrs. Verna Paddock.
Twin Falls	Twin Falls	3,825	6	40.2	.....	72	2	13	27	46	1.90	.....	0.40	0.2	10	3	25	2	w.	J. A. Waters.
Vernon	Fremont	.....	13	34.4	+ 0.5	60	2†	− 2	27	35	2.77	+ 1.47	0.56	7.0	12	6	9	15	sw.	A. M. Slatery.
Wallace	Shoshone	2,728	3	36.9[b]	.....	61	2	20	27	25[b]	12.05	.....	2.36	.....	19	.....	.....	.....	w.	U. S. Weather Bureau.
Wendell	Lincoln	3,400	3	40.4	.....	73	2	16	4	46	2.73	.....	0.72	3.0	10	7	11	12	w.	Chas. L. Dingler.
Washington.																				
Aberdeen	Chehalis	162	19	45.2	− 0.5	56	1†	31	15†	20	15.31	+ 0.49	2.12	0.0	21	0	21	9	w.	Carl S. Weatherwax.
Anacortes	Skagit	60	16	43.2	.....	55	1	28	19	19	4.04	− 0.48	0.54	0.0	16	6	13	11	.....	Douglas Allmond.
Baker	....do	200	4	41.6	.....	58	14	27	25	26	14.66	.....	2.56	0.5	17	5	3	22	.....	Robt. M. White.
Bellingham	Whatcom	60	15	45.4	+ 0.4	59	2†	18	24	37	5.89	+ 1.20	0.62	1.0	18	5	4	21	.....	Sanford B. Mayhew.
Blaine	....do	57	13	42.4	+ 1.3	54	2†	26	25	20	9.40	+ 2.54	1.82	2.0	23	2	14	14	ne.	U. S. Weather Bureau.
Blalock Island	Benton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Blalock Island Garden Co.
Blewett	Chelan	2,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John Beermeister.
Bremerton	Kitsap	30	.....	.....	.....	.....	.....	.....	.....	.....	11.51	.....	.....	0.0	20	.....	.....	.....	.....	U. S. Navy Yard.
Brewster	Okanogan	1,620	.....	35.4	.....	59	7	15	26	27	2.63	.....	0.57	15.2	12	9	7	14	se.	Mrs. H. F. Bertram.
Bumping Lake	Yakima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Cashmere	Chelan	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.55	.....	1.33	15.0	14	9	9	12	nw.	Valley Power Co.
Cedar River	King	535	3	.....	.....	.....	.....	.....	.....	.....	10.75	.....	2.42	T.	12	6	8	16	.....	George Landsburg.
Centralia	Lewis	212	17	45.2	0.0	69	1	27	24†	29	12.64	+ 3.79	2.50	0.0	26	2	12	16	s.	I. S. Turner.
Cheney	Spokane	2,351	11	37.3	.....	58	2†	23	26	26	3.46	+ 0.95	0.97	2.5	13	2	1	27	sw.	Northern Pacific Ry.
Cle Elum	Kittitas	1,930	11	35.3	− 2.2	58	1	14	25	30	5.13	+ 0.73	0.85	19.0	15	7	7	16	ne.	J. A. Balmer.
Clearbrook	Whatcom	140	7	40.6	.....	56	6†	22	25	24	14.79	.....	4.28	4.0	19	2	11	17	ne.	Geo. Gibbs.
Clearwater	Jefferson	135	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Colfax	Whitman	2,300	21	40.8	+ 1.7	66	1	23	14	41	2.34	− 0.95	0.75	1.0	7	.....	.....	.....	.....	W. H. James.
Colville	Stevens	1,635	10	37.3	+ 3.8	56	6	22	4†	30	2.62	+ 0.44	0.48	3.0	11	4	4	22	sw.	W. L. Sax.
Conconully	Okanogan	2,300	10	34.9	− 0.5	58	7	8	26	30	3.31	+ 1.40	0.56	18.5	15	7	2	21	.....	Wm. Baines.
Cowiche	Yakima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Crescent	Lincoln	2,250	10	35.8	− 0.7	54	7†	19	26	21	3.18	+ 0.76	.....	7.0	9	5	6	19	sw.	Otto Wollweber
Davenport	....do	2,450	1	35.8	.....	54	7	18	26	23	2.40	.....	0.50	5.3	16	4	5	21	sw.	W. H. Reed.
Dayton	Columbia	1,700	24	42.7	+ 2.5	66	1	28	14	26	4.15	+ 1.62	0.82	1.0	17	4	6	20	sw.	W. W. Hendron.
Detroit	Mason	30	2	44.4	.....	61	1	30	15†	21	16.03	.....	3.40	0.0	22	2	8	20	s.	Walter O. Eckert.
Dixie	Walla Walla	5,000	1	.....	.....	.....	.....	.....	.....	.....	9.30	.....	1.36	10.5	19	3	3	24	sw.	T. Z. Andrews.
Duckabush	Jefferson	380	2	41.4	.....	66	1	26	25†	22	16.48	.....	3.50	1.5	19	1[d]	6[d]	19[d]	sw.	E. J. Finch.
East Sound	San Juan	500	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Benj. E. Harrison.
Ellensburg	Kittitas	1,571	22	35.6	− 0.7	65	1	16	26	36	2.48	+ 0.84	0.52	9.7	12	9	3	18	e.	R. Lee Barnes.
Ephrata	Grant	1,265	7	42.0	.....	70	1†	22	26	40	.....	.....	.....	.....	.....	6[b]	10[b]	12[b]	n.	T. J. Cook.
Forks	Clallam	480	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. A. Markham.
Fort Simcoe	Yakima	1,427	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank C. Hill.
Goat Lake	Snohomish	2,900	1	.....	.....	.....	.....	.....	.....	.....	23.74	.....	5.50	18.5	18	.....	.....	.....	.....	C. M. Mackintosh.
Gold Creek	Yakima	2,600	1	.....	.....	.....	.....	.....	.....	.....	4.21	.....	0.85	14.5	10	7	0	23	w.	John W. Anderson.
Gold Hill	....do	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Goldendale	Klickitat	1,600	4	40.7	.....	66	1	25	4	32	5.00	+ 1.92	0.80	8.0	14	5	6	19	w.	Klickitat Co. Abstract Co.
Granite Falls	Snohomish	397	7	.....	.....	.....	.....	.....	.....	.....	9.06	.....	1.39	0.0	20	1	8	21	e.	C. H. Cleaver.
Guler	Klickitat	2,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.0	.....	.....	.....	.....	.....	Frank Kuehnel.
Hatton	Adams	1,100	5	39.5	.....	67	1	18	4	36	1.80	.....	0.30	2.7	15	1	11	18	sw.	Dr. A. V. Marion.
Huntsville	Columbia	1,400	2	.....	.....	.....	.....	.....	.....	.....	3.53	.....	0.90	2.9	13	3	4	23	.....	Dr. B. Hill.
Irene Mountain	Okanogan	3,015	1	.....	.....	.....	.....	.....	.....	.....	1.49	.....	0.36	8.6	12	2	4	24	sw.	Mrs. Manda Shain.
Kacheso Valley	Kittitas	3,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Kennewick	Benton	367	15	43.9	+ 1.9	75	1	23	4	35	1.25	+ 0.32	0.35	1.0	8	.....	.....	.....	.....	Mrs. L. W. Soth.
Kettle Falls	Stevens	1,265	1	37.8	.....	60	7	22	24	25	3.05	.....	0.82	.....	15	4	8	18	.....	Harry H. Cole.
Kiona	Benton	430	5	42.3	.....	68	5	23	4†	42	1.36	.....	0.26	2.5	10	4	5	21	sw.	Dr. F. S. Hedger.
Kosmos	Lewis	775	4	42.2	.....	64	2	21	24	28	8.46	.....	2.06	0.0	20	0	9	21	s.	J. A. Ulsh.
La Center	Clarke	250	13	42.6	− 3.8	62	10	26	15	24	9.99	+ 0.56	1.62	0.0	18	2	14	14	sw.	Joseph Brothers.
La Crosse	Whitman	1,400	1	41.4	.....	65	2	22	4	33	3.48	.....	0.63	1.5	14	4	7	19	e.	M. E. Schreck.
Lake Chelaim	Kittitas	2,171	1	.....	.....	.....	.....	.....	.....	.....	9.42	.....	1.63	26.5	18	1	2	27	nw.	U. S. Reclamation Service.
Lake Kachess	....do	2,235	2	35.1	.....	53	1	19	25	19	11.76	.....	2.90	29.0	17	4	4	22	e.	Do.
Lake Keechelus	....do	2,479	2	.....	.....	.....	.....	.....	.....	.....	13.95	.....	2.50	35.0	12	0	3	27	.....	Do.
Lakeside	Chelan	1,116	19	38.0	0.0	62	6	19	26	29	2.74	+ 0.83	0.69	14.5	14	3	12	15	e.	W. H. Van Meter.
Laurel	Klickitat	1,900	1	.....	.....	.....	.....	.....	.....	.....	6.96	.....	1.05	19.5	15	4	13	13	w.	Mrs. Minnie E. Strout.
Laurier	Ferry	.....	.....	35.7	.....	57	7†	16	26	30	2.42	.....	0.70	8.7	15	0	2	28	ne.	Mrs. J. S. Myers.

TABLE 1.—*Climatological data for November, 1910. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Washington—Continued.																		
Lester	King	1,614	6	39.6	.....	61	1	21	25	20	7.55	.....	1.70	T.	15	7	2	21	e.	W. W. Clabaugh.
Lone Tree	Chehalis	14	1	46.6	.....	55	11†	35	24†	13	16.61	.....	3.13	0.0	24	1	13	16	.....	U. S. A. Engineer Corps.
Longmires Springs	Pierce	2,800	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Forest Service.
Lost Creek	Okanogan	3,125	1	.....	.....	.....	.....	.....	.....	.....	1.26	.....	0.28	17.0	10	4	10	16	sw.	P. H. Leese.
Lucerne	Chelan	1,100	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Barbara Shearer.
Lyle	Klickitat	600	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Morginson.
McCumbers Ranch	Yakima	2,182	1	.....	.....	.....	.....	.....	.....	.....	7.90	.....	1.00	15.0	15	3	9	18	.....	Mrs. Mary McCumber.
Merritt	Chelan	2,175	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. B. Smith.
Mottinger	Benton	307	10	45.8	+ 1.7	73	1	28	5	40	1.67	+ 0.54	0.27	0.0	13	8	8	14	e.	G. H. Mottinger.
Mount Pleasant	Skamania	650	10	44.6	− 1.3	64	1	32	27	19	10.48	+ 1.68	1.35	.....	20	7	7	16	w.	F. M. Grout.
Moxee	Yakima	1,000	18	39.2	0.0	68	1	17	26	40	1.53	+ 0.31	0.37	8.6	13	3	13	14	.....	Henry B. Scudder.
Newport	Stevens	2,400	....	36.3	.....	54	7	23	26	22	5.53	.....	1.28	9.8	18	1	6	23	sw.	Chas. M. Talmadge.
Nighthawk	Okanogan	3,050	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17.8	.....	.....	.....	.....	.....	Steve Nagy.
North Head	Pacific	211	8	47.0	− 0.7	58	1	35	24	13	9.12	+ 2.79	1.55	0.0	23	1	4	25	e.	U. S. Weather Bureau.
Northport	Stevens	1,350	11	36.8[a]	.....	53	3	22	25	22[a]	3.30	+ 0.90	1.00	.....	.....	2[b]	11[b]	9[b]	.....	Forrest B. Phillips.
North Yakima	Yakima	1,070	1	39.2	.....	66	1	20	26	29	1.49	.....	0.47	5.4	11	7	6	17	sw.	U. S. Weather Bureau.
Nutland	Klickitat	.....	1	42.4	.....	68	1	27	4†	30[a]	2.63	.....	0.38	7.2	13	.....	.....	.....	.....	J. R. Shepard.
Odessa	Lincoln	1,540	7	39.2	.....	70	1	12	25	35	2.26	.....	0.92	2.0	10	4	10	16	sw.	Wm. U. Neeley.
Olga	San Juan	50	20	44.2	− 0.2	57	21	30	26	15	5.72	+ 0.76	1.18	0.0	16	6	8	16	se.	Cecil S. Willis.
Olympia	Thurston	200	32	44.6	+ 0.2	65	1	31	24†	19	14.41	+ 5.81	3.77	0.0	18	1	1	28	sw.	M. O'Connor.
Omak	Okanogan	850	1	39.0	.....	77	7	15	14	53	1.97	.....	0.22	4.0	16	.....	.....	.....	.....	Wm. G. Tait.
Oroville	....do	922	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. M. Dufield.
Peola	Garfield	5,000	1	.....	.....	.....	.....	.....	.....	.....	5.04	.....	1.22	7.6	16	6	4	20	sw.	Samuel Gruell, sr.
Pomeroy	....do	1,500	18	42.2	+ 0.2	67	2	27	4	28	3.58	+ 1.01	0.73	T.	9	1	7	22	w.	Peter McClung.
Point Crescent	Clallam	259	15	41.6	− 0.7	56	6	27	26	18	8.92	+ 1.47	2.85	0.0	19	0	11	19	s.	U. S. Weather Bureau.
Point Townsend	Jefferson	80	20	44.7	− 0.4	56	10	33	25	12	1.99	− 0.69	0.48	0.0	15	3	4	23	se.	Frank Plummer.
Pullman	Whitman	2,550	18	41.5[b]	+ 3.0	58	2†	25	3†	33[b]	3.30	− 0.05	0.64	2.0	11	1[d]	10[d]	15[d]	sw.	State Agricultural College.
Quiniault	Chehalis	300	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. V. Higley.
Republic	Ferry	2,628	10	32.8	− 0.7	54	7	11	25†	31	1.24	.....	0.22	6.5	12	4	2	24	w.	Geo. B. Stocking.
Rex Creek	Chelan	1,135	3	38.8[a]	.....	56	12	25	25	21	.....	.....	.....	.....	.....	7[f]	2[f]	15[f]	nw.	James M. Nicol.
Ritzville	Adams	1,825	11	.....	.....	.....	.....	.....	.....	.....	3.00	+ 1.71	0.54	0.0	17	.....	.....	.....	.....	Northern Pacific Ry.
Rock Lake	Whitman	1,910	4	38.6	.....	60	2	21	4	30	3.54	.....	.....	2.0	7	4	3	23	sw.	P. M. Ramsey.
Rosalia	....do	2,425	18	38.4	+ 0.5	59	2	26	14	21	3.89	+ 0.73	0.76	2.0	11	3	2	25	sw.	Hans Mumm.
Russells Ranch	Yakima	2,870	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Maggie M. Russell.
Scenic Hot Springs	King	2,021	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seattle	....do	123	19	45.5	+ 1.0	60	1	32	24	13	8.47	+ 2.61	2.25	0.0	18	0	6	24	se.	U. S. Weather Bureau.
Sedro-Woolley	Skagit	38	13	42.9	− 1.3	57	2†	24	25	17	6.37	− 0.85	0.97	0.0	21	4	7	19	.....	Mrs. H. L. Devin.
Sixprong	Klickitat	1,240	3	42.2	.....	65	1	27	25	26	2.01	.....	0.36	5.0	12	5	2	23	sw.	C. E. Comstock.
Skagit Power Dam	Whatcom	.....	.....	39.4	.....	51	1	29	25	13	17.54	.....	2.75	7.0	20	7	0	23	.....	Skagit Power Co.
Snohomish	Snohomish	100	16	44.2	− 0.5	61	4	28	25†	25	7.43	+ 0.92	1.55	0.0	21	3	0	27	se.	Warren Hodge.
Snoqualmie Falls	King	667	11	43.1	.....	59	1	28	24†	14	11.00	+ 1.74	2.40	0.0	22	15	0	15	.....	O. N. Wiswell.
Snoqualmie Pass	Kittitas	3,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48.0	.....	.....	.....	.....	.....	C. E. Ingraham.
Snyders Ranch	Okanogan	2,200	1	.....	.....	.....	.....	.....	.....	.....	4.34	.....	0.75	37.0	13	8	13	9	e.	Geo. M. Snyder.
South Bend	Pacific	16	15	45.4	− 2.3	61	1	30	24	19	17.13	+ 3.01	3.79	0.0	25	10	2	18	e.	Miss Winifred Eichner.
Spokane	Spokane	1,943	29	39.2	+ 1.9	60	2	26	14	24	3.71	+ 1.41	0.85	4.3	19	0	1	29	sw.	U. S. Weather Bureau.
State University	King	.....	1	42.4	.....	55	1	28	24	14	8.36	.....	1.73	0.0	20	5	4	21	s.	University of Washington.
Stokes Ranch	Okanogan	2,670	1	.....	.....	.....	.....	.....	.....	.....	5.44	.....	1.23	39.9	13	9	8	13	nw.	Chas. W. Gunn.
Sullivan Lake	Stevens	2,700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Forest Service.
Sumner	Pierce	77	2	43.0	.....	60	20	25	24	19	8.61	.....	1.78	0.0	21	5	7	18	sw.	H. E. Thompson.
Sunnyside	Yakima	740	15	39.7	− 0.1	67	1	18	26	33	1.22	+ 0.22	0.25	3.5	10	5	6	19	sw.	U. S. Reclamation Service.
Tacoma	Pierce	213	24	44.8	+ 0.7	62	1	28	24	20	9.65	+ 1.12	2.44	0.0	20	5	2	23	sw.	U. S. Weather Bureau.
Tatoosh Island	Clallam	86	25	46.4	+ 0.5	56	9	36	27	17	12.98	+ 0.89	2.62	0.0	22	1	5	24	ne.	Do.
Tieton	Yakima	2,000	1	34.7	.....	56	1	12	25	23	4.79	.....	1.06	21.9	16	6	7	17	w.	U. S. Reclamation Service
Touchet	Walla Walla	556	3	43.2	.....	69	1	22	4	38	1.90	.....	0.55	0.0	15	4	5	21	sw.	D. W. Dorrance.
Touchet Ridge	Columbia	2,500	1	.....	.....	.....	.....	.....	.....	.....	12.63	.....	1.95	6.0	15	5	5	20	sw.	R. H. King.
Trinidad	Grant	900	6	39.2	.....	64	7	22	26	28	1.67	.....	0.84	1.3	12	7	7	16	nw.	J. C. Wheeler.
Twin Sister Lakes	Yakima	4,500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Twisp	Okanogan	1,350	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tyee	Chelan	2,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Elias McCrea.
Upper Clealum Valley	Kittitas	5,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vancouver	Clarke	100	35	45.7	+ 0.4	66	1	30	15	27	8.78	+ 3.25	1.37	0.0	18	2	7	21	s.	A. A. Quarnberg.
Vashon Island	King	40	21	44.3	− 0.7	60	1	30	24	12	12.34	+ 5.16	2.39	0.0	24	5	1	24	s.	Miss Gertrude McClintock.
Wahluke	Grant	410	6	42.4	.....	65	1†	21	26	26	1.80	.....	0.40	1.3	10	5	4	21	.....	F. C. Koppen.
Wallace	Okanogon	4,000	1	.....	.....	.....	.....	.....	.....	.....	3.35	.....	0.54	22.9	15	1	12	17	s.	G. A. Wallace.
Walla Walla	Walla Walla	1,000	26	43.9	+ 1.0	68	10	29	5	31	3.09	+ 1.56	1.13	0.3	17	4	2	24	s.	U. S. Weather Bureau.
Waterville	Douglas	2,624	20	30.7[b]	− 2.8	58	7	3	26	37	.....	.....	.....	.....	.....	11[a]	7[a]	13[a]	.....	O. R. Hopewell.
Wenatchee	Chelan	1,169	11	35.8	− 1.6	58	6	19	25†	24	2.75	+ 0.55	0.84	22.0	14	5	10	15	w.	Geo. A. Fitcher.
West Branch	Stevens	2,600	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Forest Service.
Wilbur	Lincoln	2,203	11	36.2	+ 0.3	60	7	16	26	27	2.62	+ 0.86	0.45	.....	13	2	4	24	se.	Rollin J. Reeves.
Yale	Cowlitz	375	3	43.0	.....	67	1	26	12	24	23.25	.....	2.95	0.0	19	6	13	11	e.	L. F. Williams.
Zindel	Asotin	715	8	43.0	.....	70	1	29	21	38	6.42	.....	1.50	0.0	12	5	10	15	n.	M. W. Zindel.
Oregon.																				
Albany	Linn	214	28	45.0	− 0.5	62	9	29	26	22	10.68	+ 4.78	1.60	0.0	20	1	5	24	s.	F. M. French.
Ashland	Jackson	1,963	22	44.2	− 0.7	63	1	23	26	25	6.59	+ 4.15	1.60	6.0	11	3	8	19	w.	G. G. Eubanks.
Astoria	Clatsop	78	48	47.5	+ 0.3	61	1	34	24	16	15.85	+ 4.80	2.19	0.0	24	5	6	19	sw.	Irving Club.
Baker City	Baker	3,466	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Bay City	Tillamook	14	15	47.4	− 1.8	62	10†	29	24	25	18.38	+ 1.98	2.10	0.0	21	3	7	20	se.	J. O. Bozarth.
Bend	Crook	3,629	8	35.5	.....	73	1	13	26	44	4.38	.....	1.02	14.0	14	10	6	14	s.	F. O. Minor.
Birch Creek	Wheeler	2,900	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. S. Matteson.
Black Butte	Lane	1,200	9	41.2	.....	55	10	25	26	21	10.15	+ 1.85	2.05	0.0	15	7	6	17	sw.	William Harris.
Blalock	Gilliam	237	11	44.6	− 0.6	72	1	28	3	34	2.58	+ 0.78	0.40	T.	12	5	1	24	e.	Geo. W. Long.
Burns	Harney	4,157	20	36.8	+ 2.4	64	1	− 2	15	48	3.33	+ 1.74	0.90	17.0	8	9	2	19	.....	J. C. Welcome, jr.
Cascade Locks	Hood River	100	19	43.6	− 1.7	64	1	32	25†	19	18.80	+ 6.99	2.78	T.	21	7	2	21	e.	Val. W. Tompkins.
Cazadero	Clackamas	503	1	45.6	.....	67	10	28	13	25	10.15	.....	1.60	0.0	19	3	5	22	se.	Alf Drill.
Christmas Lake	Lake	4,320	2	34.6	.....	68	1	−11	26	53	2.93	.....	0.49	9.5	13	5	3	22	sw.	John C. Mean.
Condon	Gilliam	2,888	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Williams.
Corvallis	Benton	266	21	44.4	− 1.3	64	9	29	13†	25	10.45	+ 3.63	2.00	0.0	19	2	6	22	sw.	Oregon Agricultural Coll.
Dayville	Grant	1,500	15	41.8	− 0.7	76	2	16	4	48	2.54	+ 1.34	0.60	4.5	14	6	6	18	sw.	Dr. J. Campbell-Martin.
Deadwood	Lane	350	....	47.0	.....	65	14	31	26	20	24.06	.....	3.78	0.0	19	4	8	18	sw.	Jos. Slemmons.
Doraville	Columbia	600	8	42.0	.....	89	1	27	25	17	10.59	.....	1.94	0.0	23	2	6	22	se.	Jos. Hackenberg.
Drain	Douglas	300	7	46.4	.....	66	10	32	26	26	11.20	.....	2.33	0.0	18	1[a]	4[a]	24[a]	sw.	Ira Wimberly.
Echo	Umatilla	625	5	43.0	.....	69	70	22	5	33	1.99	.....	0.22	1.0	12	6	2	22	w.	R. B. Stanfield.
Ella	Morrow	830	5	41.8	.....	68	1	21	4	38	1.95	+ 0.47	0.28	3.0	13	5	11	14	sw.	C. F. Troedson.
Eugene	Lane	453	20	45.7	− 0.9	66	10	31	13	32	10.51	+ 5.32	2.00	0.0	18	2	11	17	nw.	F. L. Barker.
Fairview	Coos	142	12	47.0	− 2.3	65	2†	32	4†	33	17.38	+ 5.96	2.30	0.0	11	8	4	18	nw.	William Bettys.
Falls City	Polk	355	12	44.1	− 0.6	63	1	27	26	28	18.59	+ 2.66	2.80	T.	20	8	0	22	e.	Chas. F. Vick.
Forest Grove	Washington	220	20	44.0	− 0.4	63	1	28	13†	27	13.76	+ 4.58	2.28	1.5	20	0	4	26	s.	Pacific University.
Gardiner	Douglas	72	20	48.3	− 1.4	62	10	31	26	20	21.37	+10.64	3.80	0.0	17	10	1	19	.....	Hon. J. S. Gray.

TABLE 1.—*Climatological data for November, 1910. District No. 12*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon—Continued.																				
Glendale	Douglas	1,441	5	46.4	.....	68	4†	30	5†	38	2.92	.....	1.21	0.0	11	11	9	10	nw.	B. J. Simpson.
Glenora	Tillamook	575	18	43.4	− 0.2	61	1	30	14†	23	37.02	+10.78	7.00	0.0	22	4	4	22	sw.	Mrs. Jennie Reeher.
Gold Beach	Curry	40	8	48.6	.....	72	1	31	13†	32	17.49	+ 6.85	4.10	0.0	14	10	17	3	nw.	C. Dewey.
Granite	Grant	4,680	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	L. M. Ford.
Grants Pass	Josephine	956	21	44.8	+ 0.2	68	1	22	5	36	11.26	+ 6.68	3.55	1.5	16	6	2	22	sw.	John B. Paddock.
Grass Valley	Sherman	2,381	8	36.2	− 2.7	60	11	14	3	37	2.73	+ 1.16	0.90	14.0	8	18	4	8	sw.	Oreg. Ry. & Navigation Co.
Grindstone	Crook	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Orrin C. Mills.
Headworks	Clackamas	719	4	43.9	.....	69	20	27	16†	26	12.78	+ 1.20	1.94	0.0	21	5	1	24	sw.	Portland Water Works.
Heppner	Morrow	1,950	21	41.6	− 2.1	68	2	24	4	31	1.67	+ 0.33	0.54	1.2	14	7	4	19	nw.	Ralph Kenton.
Hermiston	Umatilla	450	3	43.4	.....	69	12†	20	4	36	1.73	.....	0.30	T.	15	5	6	19	.....	C. W. Kellogg.
Hood River	Hood River	300	19	40.2	− 1.9	56	5	25	12	24	7.70	+ 1.81	1.50	9.0	17	10	0	20	W.	H. L. Hasbrouck.
Huntington	Baker	2,165	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Day.
Jacksonville	Jackson	1,640	21	43.8	− 0.2	67	1	27	13	32	9.33	+ 5.52	2.50	2.0	12	9	2	19	.....	E. Britt.
Joseph	Wallowa	4,400	21	30.4	− 4.1	60	10	10	26	30	3.39	+ 1.48	0.79	10.0	7	7	3	20	n.	F. F. McCully.
Klamath Agency	Klamath	4,169	2	35.1	.....	68	3	9	15	35	6.80	.....	1.40	26.0	13	12	2	16	s.	Edson C. Watson.
Klamath Falls	....do	4,250	15	36.4	− 3.3	66	1	4	25	38	5.18	+ 3.84	1.45	13.5	12	7	6	17	nw.	W. H. Heileman.
La Grande	Union	2,784	24	40.0	− 0.8	83	1	20	4	34	3.14	+ 0.99	0.72	2.8	15	3	6	21	se.	W. A. Worstell.
Lakeview	Lake	4,800	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. L. Horton, jr.
McKinzie Bridge	Lane	2,150	1	40.2	.....	65	1	21	13	39	18.17	.....	3.38	1.0	20	6	0	24	sw.	Howard W. Turner.
McMinnville	Yamhill	12	6	45.4	+ 0.2	63	1	29	13†	27	9.83	+ 1.35	1.59	0.0	19	3	7	20	sw.	U. S. Weather Bureau.
Madras	Crook	1,400	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Frissell.
Marshfield	Coos	4,070	4	48.8	.....	69	1	30	13†	30	15.91	.....	2.60	0.0	20	.....	.....	.....	.....	J. H. Pruett.
Merrill	Klamath	180	22	38.0	.....	72	1	3	26	47	4.20	.....	2.00	7.0	5	10	11	9	.....	Mrs. Agnes Ritchson.
Mikkalo	Gilliam	1,600	4	40.9	.....	65	1	24	4†	27	2.09	.....	0.62	5.0	9	6	3	21	w.	Frank Little.
Miramonte Farm	Clackamas	195	21	44.8	+ 1.2	62	1†	30	15†	22	9.53	+ 1.64	1.52	0.0	18	2	8	20	s.	G. M. Muecke.
Monroe	Benton	350	13	44.9	− 1.5	65	10	29	13	24	11.88	+ 2.31	1.70	0.0	20	3	4	23	sw.	L. A. Peek.
Mount Angel	Marion	485	24	45.6	+ 0.2	65	10	30	13†	26	10.30	+ 2.97	2.72	0.0	18	9	3	18	s.	Dr. U. F. Fisher.
Mountain Park	....do	1,440	4	38.5	.....	61	1	25	13	27	16.94	.....	2.10	20.5	19	1	2	27	w.	M. Markley.
Musick	Douglas	5,000	.....	37.4	.....	65	1	19	26	27	16.92	.....	3.03	68.0	20	6	2	22	sw.	Alex. Lundburg.
Newport	Linton	60	22	47.8	− 1.2	60	1†	63	25†	24	11.22	− 0.25	2.00	0.0	20	7	19	4	sw.	William Matthews.
Paisley	Lake	4,500	6	38.8	.....	66	2	7	26	32	2.83	.....	1.00	15.0	7	.....	.....	.....	sw.	E. C. Woodward
Pendleton	Umatilla	1,070	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. F. Averill.
Pilot Rock	....do	1,817	1	42.6	.....	67	1	24	5	32	3.10	.....	0.94	1.0	16	8	0	22	nw.	John P. McManus.
Pompeii	Clackamas	3,879	15	35.0	− 1.8	58	1	14	26	22	16.17	+ 2.19	1.84	57.0	22	6	4	20	sw.	O. C. Yocum.
Portland	Multnomah	57	38	46.8	+ 0.7	65	9	34	15	23	8.24	+ 1.59	1.87	0.0	20	1	3	26	se.	U. S. Weather Bureau.
"P" Ranch	Harney	4,300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. P. Jefferson.
Prineville	Crook	2,864	13	39.2	− 2.5	71	1	13	4	47	3.24	+ 2.18	1.07	3.5	11	7	1	22	.....	Geo. Whiteis.
Prospect	Jackson	2,750	4	40.7	.....	74	1	19	26	56	13.16	.....	3.30	9.5	15	6	8	16	nw.	E. F. Graham.
Ramsey	Wasco	1,350	.....	37.8	.....	65	20	20	26	25	3.77	.....	0.77	17.9	15	6	5	19	w.	Mrs. Iva B. Collins.
Range	Grant	3,500	1	38.6	.....	69	1	15	8	48	2.38	.....	0.86	T.	12	9	4	17	.....	Craig Thom.
Richland	Baker	2,350	8	39.0	+ 0.4	67	1	18	3†	39	2.60	.....	0.38	6.5	15	4	4	22	sw.	C. G. Morgan.
Riverside	Malheur	3,000	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Leah Fairman.
Roseburg	Douglas	523	33	46.0	− 0.4	67	10	28	26	27	9.15	+ 4.67	3.06	0.0	21	0	11	19	s.	U. S. Weather Bureau.
Salem	Marion	120	20	45.5	− 1.5	65	20	31	26	22	8.03	+ 1.23	1.82	0.0	18	2	3	25	sw.	M. P. Baldwin.
Siskiyou	Jackson	4,115	1	39.6	.....	69	1	17	26	29	11.40	.....	2.47	33.0	14	7	1	22	s.	U. S. Weather Bureau.
Sparta	Baker	4,150	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. A. Wright.
Stafford	Clackamas	400	13	45.6	+ 0.3	65	1	30	26	27	11.29	+ 1.24	2.14	0.0	19	.....	.....	.....	sw.	John P. Gage.
The Dalles	Wasco	112	35	38.2	− 4.0	67	1	27	13	25	4.18	+ 1.98	0.53	5.0	16	6	3	21	sw.	S. L. Brooks.
Toledo	Linton	75	20	52.2	+ 4.0	70	1	36	26	20	14.70	+ 2.29	2.00	0.0	13	10	10	10	sw.	C. B. Crosno.
Umatilla	Umatilla	340	14	43.6	+ 0.2	67	1	21	4	36	1.76	+ 0.59	0.42	T.	10	9	4	17	w.	Mrs. Helen T. Duncan.
Vale	Malheur	2,242	18	39.6	+ 2.5	65	1†	13	5	43	2.65	+ 1.67	0.39	7.0	17	10	6	14	nw.	H. P. Osborn.
Van	Harney	3,506	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Howe.
Wallace Orchard	Polk	170	1	44.7	.....	61	1	27	15	27	9.21	.....	1.91	0.0	18	0	10	20	.....	Chas. A. Parks.
Wallowa	Wallowa	2,935	7	36.8	.....	67	2†	16	27	38	3.57	.....	0.86	10.5	17	3	1	26	nw.	L. J. Coverstone.
Wasco	Wasco	1,263	2	43.3	.....	65	1	29	26	25	3.27	.....	0.43	11.0	13	8	4	18	w.	A. J. Swift.
Warmspring	Crook	1,200	8	40.4	.....	64	1	19	4	32	4.04	.....	0.80	4.0	12	6	3	21	nw.	C. C. Covey.
Weston	Umatilla	1,800	20	41.3	+ 0.6	72	1	23	13	38	3.77	+ 0.52	0.75	1.5	18	2	3	25	se.	M. A. Baker.
Williams	Josephine	1,368	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. John.
Yonna	Klamath	.....	3	35.6	.....	68	1	−10	25	49	6.52	.....	1.74	20.5	11	7	10	13	s.	Jacob Rueck.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
¶ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for November, 1910. District No. 12, Columbia Valley.*

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Montana.																														
Anaconda	Missoula	.03		.11				*	.32			*	.26			T.		.02	.04		T.	.13	T.	T.	*	1.19		T.	.12			2.22
Bison Mountain	do	.08		.48					.45	.18		.20							.18	.12		.36	.12	.17	.32	.42		.04	.13	.05		3.30
Butte	do	T.	T.						.35			.40	T.					.05	T.			.02			.35	.35			.10			1.62
Columbia Falls	Flathead																													
Como	Bitter Root	.01	.04					.27	.17	.45	.08	.45							.11	.05	.17	.29	.44	.20	.49	.05	.04	.04	.35			3.70
Dayton ‖	Flathead																													
East Anaconda ‖	Missoula	.05		.09				T.	.38	T.		.02	.21			T.		.06	T.		T.	.15	T.	T.	1.10	.20		T.	.11			2.37
Fortine	Flathead								.18	.08	.18	.22	.14					T.	.15		T.	.42		.04		.03	.18	T.	T.		.05	1.67
Hamilton	Bitter Root	T.							.50		.34	.08	.33						.10			.19				.06					2.11
Hat Creek	Missoula	.09		.44		.15	.05	.10	.40		T.		.16					.05	T.	.06		.03	.07		.29	.31	.16	.02	T.	T.		2.38
Kalispell	Flathead					T.		.03	.18	.24	.31	.05						T.	.18	.03	.18	.12		.07		.12		.15	T.		.02	1.68
Lost Creek	Missoula	.80		.12					.12									T.		T.				T.	.10	.65	T.		.30	T.		2.09
McGinnis Meadows	Kootenai			.15				.20	.53	.29	.61	.11							.16		.16	.41	.02	.10		.09		.10	.05		.03	3.07
Missoula	Missoula	T.		.04	T.		T.	T.	.30	.10	.33	.04	.14					T.	.09		T.	.28	.05	.17	T.	.13	.01	.01	.40	.28	T.	2.35
Ophir	do			.26					.32	.11	.12	.35						T.	.05	T.		.43		.28	.39			T.	.10	.25		2.66
Ovando	do			.30			T.		.35	.10	.20			.15		.11	.05	.20	.40			.33	.40	.30	.10	.35	.40	.30	1.00	.30		5.34
Philipsburg	do	.05		.10				T.	.25	.15	T.	T.	.44					.10				.08	T.		.02	.90	T.		.05	T.		2.14
Plains	Columbia			T.			T.	T.	.80	.20	.40	T.								T.	T.	T.		T.	T.	T.		.20	.30			1.90
Pleasant Valley	Kootenai		.04					.50		.25	.60	.30						T.	.10	.15		.65	.03	.22	.05	.45		.11	.20		.05	3.70
Poison	Flathead								.20	.40	.90								.14		.55					.35						2.54
St. Ignatius	do			.11			.03	.01	.27	.01		.34	.13						.08			.03		.01		.30			.27		.40	1.99
St. Regis	Missoula			.63				.40	.36	.71	.54	.32							.07	.47	.63	.23	.15		.20	.15		.09	.30			5.25
Saltese	do			.81				‡.98	.45	85	1.45								.45		.68	1.10	.78	.65	.20	.17		.42	.18			10.17
Snowshoe	Kootenai	.09	.01	.34	T.	T.	.09	1.75	.90	.51	2.32	.59							.30	.15	.72	2.64	.68	.45	.07	.20	.06	.17	.09		.04	12.17
Troy	do	.32	.05	.50			.20	1.69	.08	.23	.18	.60							.07		.35	1.25	.10	.40		.03	.07	T.				6.12
Upper Lake McDonald	Flathead																													
Willow Glen St'k F'm ‖	Missoula	.03	.06	....				.10	.30			.31	.07					T.				.13	T.	T.	.50	.45			.02			1.97
Wyoming.																														
Afton	Snake																			.15		.06		.25		.10	.20		.06			0.82
Alta	do	.08		.06				.03						.40					.10	.35		.37	T.	.24	.08		.12		.20	T.		2.03
Bedford	do									.05								T.		.34		.10	.11	.53								
Snake River	do			.10					.40	.30	.30								.20	.30		.50	.20	.90	.20	.10	.20		.90			4.60
Nevada.																														
San Jacinto	Snake											.04	T.	T.	T.				.27			.20	.10	.10		.15						0.86
Utah.																														
Standrod	Raft									.10			.03	.04	T.				.30			.14	.07	.16	.04		.01	.05				0.94
Idaho.																														
Albion	Upper Snake								.15	.10			T.						.30	.06				T.	.50	.53		T.	T.	T.		1.64
Almo	do																													
American Falls	do																													
Blackfoot ‖	do								.06	.05		.01	.05	T.		T.		T.	.44			.17	.10	.03		.06		T.	.02	T.		0.99
Blackfoot Dam	do								.09	.11	.02			.01		.02		.05	.22	.05		.06	.12	.33				.01	.02	.09		1.20
Bock's Ranch	Boise							.05	.40	.10	.13	.37	.41					T.	.24	.02	.84	.25		1.10		.11		.49	.38	.21		5.10
Bogus Creek	Payette							.11	.17	.23	.27	.56	.30					.03	.57	.11	.15	.92	.07	.86	.06	.43		.17	.52	.15		5.68
Boise	Boise		T.					.10	.17	.04	T.	.43	.11	T.				.01	.34		.02	.28	.08	.28	.07	.28		.26	.05	.01		2.53
Bonners Ferry	Upper Columbia		.00	.19		T.	.38	.67	...	.18	.88								.07		.53	.80	T.			.20		.05			4.01
Boulder Mine	Boise							.21	.86	.33	.13	.33	.78					T.	.46	.09		1.12	.20	.62	.07	.49		.46	1.03	.35		7.53
Buhl	Upper Snake								.60												.60	.50	.30	.40					.26			
Burke	Upper Columbia																													
Caldwell	Boise			T.				.03	.05	.04	T.	.22	.03					T.	.33		.03	.23		.33	.10	.32		.27	.12	.05		2.15
Camas	Lost R. Region																		.37	.02	.18	.60		.74	.20	.21		.50	.30			5.67
Cambridge	Middle Snake							.34	.58	.40	.34	.64	.25																			
Cedar Creek Dam	Upper Snake									.09								T.	.23			T.	.14	.16	.10				.09			0.81
Chesterfield	do																													
Cœur d'Alene	Upper Columbia																													
Cottonwood Creek	Boise																													
Crawford	Payette																													
Culdesac	Clearwater		.48						.41	.38	.26	1.10							.30			1.10		.50				.42			4.95
Deary	do																													
Dent	do	.04						.75	1.37	.87	.13								.68		.77	.78					.06	.17	.19	.02		5.83
Driggs	Upper Snake														35							.17	.05	.65	.05	.03	.10	T.	.05	T.		1.45
Edie	Lost R. Region												.20	.10					.18			T.		T.		T.	T.	T.				0.48
Edwardsburg	Salmon																													
Emmett	Payette				T.			.09	.25	.07	.04	.22	.40					T.	.31		.03	.51		.32	.12	.44		.18		.07		3.05
Flowers	Wood-Malad																	..														
Forney	Salmon											.55							.06	.04				.09					.17			0.91
Garden Valley	Payette			T.				.20	.75	.20	.28	.34	.38					T.	.34		T.	1.25		.95	.15	.38		.35	.85	.10		6.52
Garnet	Middle Snake									.20		.02	.17						.12			.17	.18									
Glenns Ferry	do								.04	.01	.02		.12						.20			.57	.02	.53	.05	.10		.10				1.76
Gooding	Wood-Malad								.06	.05	.02		.13						.17			.39	.01	.73	.07	.02		.06		.01		1.72
Grand Forks	Upper Columbia	.18		.76			.20	2.00	.90	.54	1.64	.72	.08							.13	1.18	2.40	.29	.54	.13	.08	1.00	.22	.35			13.34
Grandview	Middle Snake							.07	T.		.10	.45							.21			.05	T.	.12	.04	.22		.02		T.		1.28
Grimes Pass	Boise		.04				.21	.59	.50	.33	.19	.45	.02					.02	.18	.17	.85	.37	.99	.37	.46	.12		1.00	.46	.02		7.34
Guffey	Middle Snake							T.	.03			.06	.26	T.					.34		.02	.12	.02	.27	T.	.41		.05	.06	.08	.01	1.73
Hailey	Wood-Malad								.26	T.	.15	.01	.18					.02	.35			.31	.22	.44	.04	.04		.06	.20			2.28
Hotspring	Owyhee								.08	T.			.29	T.								.50	T.	.30	.13	.22		.03				1.55
Idaho City	Boise																													
Idaho Falls	Upper Snake											.04						.17	.40			.15			.20		.03		.04			1.09
Indian Valley	Middle Snake																													
Irwin	Upper Snake																													
Kellogg ‖	Upper Columbia			.31			.11	.12	*	1.10	.40	.81									.31	.31	.96	.13	.18		.05	.17		.12	.12		5.20
Kirkham	Payette								1.40													1.00	1.20		.25				.50	.75			5.10
Kooskia	Clearwater			1.17			.08	.12	1.46	.12	.11	.67	.11						.22			.65	.25		.20	.10	.17		.10	.20	.12	.03	5.88
Lakeview	Upper Columbia			.27				.35	.36	.06	1.30	.70							.35			1.09	.90	.05	.18		.07	.05	.06	.10			5.89
Landore	Middle Snake			.11						.22	.61	1.39	1.20	.20				.05	.63			.10	1.08		.67	.21	.21		.20	.40	.11	.03	7.42
Lewiston	Clearwater	.02	T.			T.	.04	.65	.36	.18	.20	.72					T.		.22			.36	.24	.32	.01		.02	.02	.01	.07	.06	.01	3.51
Little Camas	Boise							.02	.53	.20	.09	.14	.25						.44			1.00		1.39		.16		*	1.02	.03		5.27
Long Gulch	do							.06	.30	.15	.12	.50	.53		.20	.12	.20		.24	.50	.10	.35		.10		.65		.80	.14	.10		5.16
Loon Creek	Salmon			T.				.14	.67	....	.10	.12	.22									.25										
Lost River	Lost R. Region																													
Lowry	Owyhee																													
McCall	Payette																													
Mackay ‖	Lost R. Region											T.			10							.24		.04	.20							0.58
Meadows	Salmon			.09			.02	.40	.92	.38	.05	.89	.28					.03	.30	.04	.17	1.21		.63	.25	.50	.04	.25	.36	.02	T.	6.85
Mesa	Middle Snake																													
Middle Fork	Clearwater	.06		.12			.08	.15	1.60	.12	.15	.48	.25							.40	.65	*	*	*	*	*	*	*	*	*	1.75	
Milner	Upper Snake								.23	T.			.04	.11					.45	T.		.37	.09	.52		.22		.11	.06	.04		2.24
Moscow	Upper Columbia						.11	.49	.53	.21	.12	.77						.02	.21		.60	.51	T.	.24		T.	.05	.10	.15	T.		3.94
Mountainhome	Middle Snake							T.	.17	.04	.05	.03	.32						.22			.64	.03	.37	.03	.26		.25				2.41
Murtaugh ‖	Upper Snake									.12			.04	.09					T.	.27		T.	.42	.28	.31		.01		.19	T.		1.73
Nez Perce	Clearwater	.03	.42				.31	.80	.25	.12	.25	.96									.48	.24	.22		.04	.02	.01		.02		.22	4.39
Oakley	Upper Snake										.10		.04						.30			.08		.08	.20							0.80
O'Hara Bar	Clearwater																															
Orofino	do	.05		.10	.06		.30	.40	.84	.39	.19	.79	.07						.81	.82	.03	.52	.02	.45			.19	.12	.28	.05	.03	6.55

TABLE 2.—*Daily precipitation for November, 1910. District No. 12*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Idaho—Continued.																														
Payette	Payette							.03	.33	.08	T.	.28	.14					T.	.27		.07	.28	T.	.20	.26	.20		.10	.39	.07	.02	2.72
Peaceful Valley	Middle Snake								.03	T.	T.	.16	T.					T.	.29		T.	.16	.13	.22	.06	.50			.19		.05	1.79
Pebble	Upper Snake								T.									.02	.28	T.		.09	.19	.80	.10		.03	.01	.16	.11		1.95
Pierson	Salmon									.32	.34	.32									.42	1.20	.92					.92				4.44
Pine	Boise											1.00							.10	.04	.15	.20	.25	.80						1.00	.47		4.01
Placerville	do																															
Pleasant Valley	do							.05	T.	.09		.20	.32						.24			.47		.42		.36		.06	.15	.05		2.41
Pocatello	Upper Snake								.47	T.				T.				T.	.29	.01		.23	.01	.19		.07		T.	.02	.01		1.32
Pocatello Nursery	do								.15	.31									.10	.13	.41	.32	.05	.05			.32					1.84
Poplar	do																															
Porthill	Upper Columbia		.10			.12	.09	.75		.03	.91	.21	.05					.12	.06		.57	.50	.07	.07		.12	.04	.06			.04	3.91
Powers Ranch	Boise						.12		.38	.08	.10	.11	.55						.45		.10	.90	1.01	.05		.23		.66				4.76
Pyle Creek	Payette							.40	.60	.40	1.00							.03	.44			1.87	T.	1.40	.16	.40		.40	1.25	.40		7.77
Rattlesnake Creek	Boise		T.					.06	.31	.14	.10	.70	.48					.02	.42	.03	.02	.92	.05	.90	.06	.20		.41	.49	.14		5.45
Richfield	Wood-Malad								.13	.02	.01		.20	.02					.20	T.		.37	.08	.72	.03	.01	T.	.21				1.98
Roseworth	Upper Snake								.11				.34						.30			.40	.15	.06	.47	.09		.27				2.19
Ruby Creek	Boise							.13	.55	.10	.09	.62	.57					.02	.38	.07	.13	1.10	.19	1.35	.06	.20		.58	.55	.26		6.95
Rupert	Upper Snake								.16		.01		.02	.02					.34	T		.27		.33	.07	.12		.02	.02			1.38
St. Maries	Upper Columbia																															
Salmon	Salmon		T.	.09			T.		.14	.06	.09	T.	.34						.08		T.	.16	.08	.50	.24	.28			.20	.12		2.38
Salmon River Dam	Upper Snake								12	.07			.14	.11					.35	.01		.30		.26	.29	.06	.04	.02				1.77
Sandpoint	Upper Columbia			.30			.20	.90	.20	.38	1.10	.61							.46		1.64	1.14	.18					.18				7.29
Sheep Hill	Boise			T.				.15	.60	.15	.14	.60	.43	T.				T.	.31	.03	.12	1.35	.01	1.49	.03	.35		.70	.81	.22		7.49
Shoshone	Wood-Malad																															
Silver City	Owyhee							.81	.02	.90	.19										.02	.60	.17	.90	.15	.18			.12	.12		4.18
Smith Prairie	Boise																															
Smith Ranger Station	Upper Columbia									.65	.95								.27		.87	.80				.22		.08				
Soldier Creek	Wood-Malad							.01	.46	.06	.11	.07	.25						.45			.90	.10	1.19	.10	.12		.43	.70			4.95
Springfield	Upper Snake								.22	T.			.20							.48		.22		.28					.11			1.51
Sugar	do									T.	.19			.04					.24				.32	.14		.10		.20			1.23
Sunnyside	Middle Snake								.16			.18	.40	T.					.32	.07	T.	.52	.22	.34	T.	.40		.10	.04			2.75
Tripod Mountain	Payette							.21	.84	.23	.15	.69	.44	.02				.20	.40		.20	1.24	.08	.68	.14	.65		.44	.57			7.18
Twin Falls	Upper Snake								.17				.10	.01					.25			.40	.15	.40	.12	.20		.10				1.90
Vernon	do			T.				T.	T.		.38		.05	.06		.04	T.	T.	.23	.54	T.	.56	.20	.30	.06	T.	.05		.30			2.77
Wallace	Upper Columbia	T.	.15	.33			.12	1.02	2.13	.47	1.46	.80	.16					T.	.22	.09	.92	2.36	.35	.68		.36	.13	.18	.12			12.05
Wendell	Wood-Malad								.35	.15	.02		.18						.28			.50	.09	.72		.17		.27	T.			2.73
Washington.																																
Aberdeen	Coast	.55	.63		.25	.11	.11	1.25	.39	2.07	.93	.45	.04				.12		.83	1.94	2.12	1.24	.98	.12				.42		.44	.32	15.31
Anacortes	Puget Sound	.45	.24	.06	T.	.15	.31	.39	.54	.26	.22		.10					.08				.32	.54	.22								4.04
Baker	do	.51	.45	.48		.42	.52	1.11	.31	.82	2.32						T.		.86	.97	2.56	1.50	.57	.67				.05	T.		.54	14.66
Bellingham	do	.50	.10	.23		.35	.07	.53	.08	.48	.22	.29							.55	.40	.52	.62	.38					.10		T.	.40	5.89
Blaine	do	.72	.28	.29	.02	.52	.13	.47	.03	.72	1.13	.05	.03				T.	.05	.28	.58	1.82	.68	.60	.29				.20	.26	.04	.21	9.40
Bialock	Columbia																															
Blewett	Wenatchee																															
Bremerton	Puget Sound	.01	.07	.18		T.		.60	.08	.60	2.58	.26	.01		T.	.01		.10	.14	.52	*	4.26	.54	.68		T.	.01		.30		.56	11.51
Brewster	Columbia	.02	T.					.05	.01	.30	.47						11		.29	.41	.11		.57					.10		T.	.28	2.63
Bumping Lake	Yakima																															
Cashmere	Wenatchee	T.	T.			.04		.42	.16	*	1.33						.01	T.	.22	.36	.65	.46	.31	.13				.20		.26		4.55
Cedar River	Puget Sound		.34				.49	1.01	.75	2.42	.19									1.42	.89	2.00	.62	.19						.43		10.75
Centralia	Coast		1.00	.21		.10		.80	.60	.90	2.15	.07	.03	.01	.02	.01	.01		.47	.27	1.30	2.50	.90	.15	.17	.05	.01	.07	.10	.39	.35	12.64
Cheney	Spokane	.07						.13	.33	.31	.90	.01					.05	.18			.97			.15					.25	.04	.07	3.46
Cle Elum	Yakima	.09		.11				.27	.22	.60	.45	.04							.30	.05	.82	.85		.46				.17		.25	.45	5.13
Clearbrook	Puget Sound	.18	.26	.76	.03	.70	.28	.47	.19	.25	1.76						4.28		.57	1.37	1.85	.82	.74					.31	.07	.20		14.79
Clearwater	Coast																															
Colfax	Palouse										.46		.39						.02		.75	.34		.28				.10				2.34
Colville	Columbia							.42		.32	.14							T.	.18	.22	.48	.38	.14	.04				.10	.20			2.62
Conconully	Okanogan	.14	.04					.23	T.	.44	.11						.10	.10	.28	.06	.48	.12	.15	.56		T.		.15		.35		3.31
Cowiche	Yakima																															
Crescent	Spokane	.18						.16		*	1.02								.45	T.	.93		.10					.34				3.18
Davenport	Columbia	.06	.03			T.		.10	.15	.18	.41	.13						.06	.13	.05	.50	.20	.04	.21				.11	.04			2.40
Dayton	do		.11				.22	.82	.51	.14	.11	.58							.11		.29	.44	.12	.26	.02		T.	.14	.17	.07	.04	4.15
Detroit	Puget Sound	.06	.23	.22		.12	.59	1.00	.33	1.00	2.47	.12					.05	.08	.42	1.27	3.40	2.30	1.28	.05				.28	.02	.04	.70	16.03
Dixie	Columbia	.02	.26	.02			.46	1.36	1.23	.28	.05	1.06	.02						.40		1.09	1.00	.15	.81	T.	T.	T.	.45	.40	.14	.07	9.30
Duckabush	do	.10	.18	.04		.20	.18	1.55	.90	1.60	2.00	.10	.25				.05	.18		2.30	3.50	1.10	1.85	.25				.15				16.48
East Sound	Puget Sound																															
Ellensburg	Yakima							.08	.12	.52		.13							.17		T.	.30	.34	.07				.16	.19	.15	.25	2.48
Ephrata	Columbia																															
Forks	Coast																															
Fort Simcoe	Yakima																															
Goat Lake	Puget Sound	.27	.01	1.48	T.		1.39	1.14	.81	1.85	1.94	1.40		.05				.03		.56	2.72	5.50	.18	2.01	2.00					.40	23.74
Gold Creek	Yakima						.26		.40	.80									.28	.15		.85		.40				.26	.11		.70	4.21
Gold Hill	do																															
Goldendale	Columbia							.60	.13	.65	.26							.10			.60	.80	.66		.10		.60	.20	.10	.10	.10	5.00
Granite Falls	Puget Sound	.56	.75	.29		.24	.12	.63	.23	.09	1.39	.29	.48				T.	.04	.60	.23	.57	1.14	.27	1.00				.02	T.		.12	9.06
Guler	Columbia																															
Hatton	do	T.	.01			.02		.08	.18	.13	.10	.09							.21		.30	.09	.02	.11				.10	.14	.22		1.80
Huntsville	do		.10					.64	T.	.12	.90				T.				.20		.32	.38	.10	.30			.20	.05	.10		.12	3.53
Irene Mountain	do	.07		.05				.06		.10	.16							.06	.18		.05	.36		.15				.17			.08	1.49
Kachess Valley	Yakima																															
Kennewick	Columbia		T.			.05			.11	.10	.30			T.	.02						.22				T.			.10		.35		1.25
Kettle Falls	do		.10					.38	.03	.15	.32	.03						.03	.30	.13	.82	.40	.21	.03				.07			.05	3.05
Kiona	Yakima						11	11			.13	.02							.20		.08		.26					.12	.10		.23	1.36
Kosmos	Columbia	.29		.60	.20	.10	.40	.40	.52	1.08	2.06		.02						.04	.03	.09	1.09	.05	.03				.18	.60	.42	.26	8.46
La Center	do		.30	.11			.60	.70	.90	.97	1.62	T.						.04	.70	.13	1.27	.53	.63	.01		.16	.40	.33	T.	.59	T.	9.99
La Crosse	Palouse	T.	.10				T.	.25	.63	.26	.10	.33					T.		.16		.47	.36	T.	.37		T.		.16	.15	.04	.10	3.48
Lake Clealum	Yakima	.30	.20	.40			.72	.41	.53	.40	.93	.10							.72	1.32	1.63	.72	.42	.23				.24	T.	.03	.12	9.42
Lake Kachess	do	.19	.08	.55		T.	.60	.95	T.	.60	1.64						T.		.30	.28	2.90	1.48	.35	.54		T.		.40	.10	.20	.60	11.76
Lake Keechelus	do	.40	.05	.50				2.50	.45	1.30	1.50									1.50	2.00	2.50							45		.80	13.95
Lakeside	Columbia	T.						.11	.07	.69	.12						.03	T.	.13	.34	.17	.16	.41	.05				.12	T.	.03	.31	2.74
Laurel	do		.07					1.05	.36	.70	.43								.30	.38	1.00	.64	.60	.30				.41	.05	.64	.03	6.96
Laurier	Kettle		.06	.05				.12		.18	.20	.06						T.	.29	.06	.70	.22	.02	.26		.05		.05			.10	2.42
Lester	Puget Sound	.23	.14	.35			.59	1.19	.30		.90	1.70							.35		.26	.18	.41	.25			T.	.10			.58	7.55
Lone Tree	Coast	.18	.58	.09		.13	.86	.87	.42	1.84	.81	.40	T.	T.	.01		T.	.31	.62	2.28	3.13	1.30	1.03	.06	.01	.02		.52	.02	.13	.99	16.61
Longmires Springs	Puget Sound																															
Lost Creek	Columbia									.07	.12								.09	.14	.12	.09	.13	.28	.09					.13		1.26
Lucerne	do																															
Lyle	do																															
McCumbers Ranch	do			.10				1.00	.40	.90	.80								.20	.40	.50	.80	.90	.40				.50	.30	.60	.10	7.90
Merritt	Wenatchee																															
Mottinger	Columbia						.05	.20	.07	.05	.20							.21		.16	.05		.27			.04	.19		.07	.11	1.67
Mount Pleasant	do		.40	.13			.45	1.12	.66	1.19	1.35	.40	.03						1.20	.23	.12	.40	.73	.02		.30		1.00	.20	.50	.05	10.48
Moxee	Yakima							.03	.07	.26	.10	.01						.01	.22	.02		.02	.20	.04				.18	.37			1.53
Newport	Pend d'Oreille	.02	.14			.03	T.	.70	.20	.19	.78	.44	T.					T.	.15	.20	1.28	.86	T.	.18		.08	.02	.21	.03		.02	5.53
Nighthawk	Okanogan																															

TABLE 2.—*Daily precipitation for November, 1910. District No. 12*—Continued.

Stations.	River basins.	Day of month.																												Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
***Washington*—Cont'd.**																															
North Head	Coast	.08	.41	.10	....	.11	.11	.42	.39	1.25	.36	.17	....	....	....	....	.02	.38	.34	.80	1.01	.29	.94	....	.08	.13	.17	.12	.02	1.42	....	9.12
Northport	Columbia	....	.30	....	....	T.	....	.30	....	T.	.60	....	....	....	....	....	....	T.	T.	.60	1.00	....	.60	T.	....	....	....	....	....	....	T.	3.30
North Yakima	Yakima	....	....	....	....	....	....	T.	.06	.47	.07	.01	....	....	....	....	....	....	.16	T.	....	.01	.36	.02	....	....	....	.12	.11	.10	T.	1.49
Nutland	Columbia	....	....	....	....	....	....	.27	.05	.33	.05	....	....	....	....	....	....	....	....	.27	.01	....	.32	.38	.18	....	....	.25	.17	.23	.12	2.63
Odessa	....do	.02	T.	....	T.	T.	T.	.02	.30	.15	.18	T.	....	....	T.	T.	T.	T.	.14	.92	.03	....	.30	....	....	....	....	.20	....	T.	T.	2.26
Olga	Puget Sound	.38	.11	.12	....	.28	.21	.52	.12	.54	....	....	....	....	....	....	....	.11	.26	.62	1.18	.57	.47	....	....	....	....	.08	....	.15	....	5.72
Olympia	....do	....	.22	.15	....	....	.30	.92	.35	.82	2.64	.31	.20	....	....	....	....	.08	.22	.42	2.18	3.77	.48	.38	....	....	....	.15	....	....	.82	14.41
Omak	Okanogan	T.	....	....	....	T.	.02	T.	.04	.06	.15	.14	.17	.13	.04	.20	.16	.12	.14	.16	....	.22	....	....	....	....	.02	....	....	....	.20	1.97
Oroville	....do	....	....	....	....	....	.01	.06	.45	.37	.09	.79	.09	....	....	....	....	....	.03	....	.47	1.22	....	.42	....	.13	.08	.03	.14	....	....	5.04
Peola	Snake	.06	T.	T.	....	....	....	.10	T.	....	T.	.25	....	....	....	....	....	....	.20	....	.73	.40	T.	.50	....	T.	....	.50	.40	....	....	3.58
Pomeroy	....do	....	.50	....	....	....	....	....	....	....	....	....	....	....	....	....	.03	.23	....	1.02	2.62	.62	.17	.15	....	T.	....	.11	....	.13	.18	8.92
Port Crescent	Coast	.02	.56	....	....	.14	.01	.74	.01	1.54	.57	.07	....	....	....	....	....	.02	.02	.08	.08	.14	.46	.08	....	....	....	....	....	....	....	1.99
Port Townsend	Puget Sound	.10	.14	.02	....	....	.04	.48	.03	.24	.06	....	....	....	....	....	....	T.	....	.64	....	....	.02	.32	....	....	....	.30	.14	T.	....	3.30
Pullman	Palouse	.05	....	....	....	....	T.	.57	....	.58	.25	.48	.05	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.05	1.24
Quiniault	Coast	....	....	....	....	....	....	.08	.01	.10	.18	.01	....	T.	....	....	....	....	.21	.22	.08	.07	.16	....	....	....	....	.08	T.	T.	.62	....
Republic	Kettle	.07	T.	T.	....	....	....	....	.06	.93	1.05	....	....	....	....	....	.02	T.	.27	.68	1.35	.76	.45	.48	....	....	....	.26	.20	.14	....	3.00
Rex Creek	Columbia	....	....	....	....	....	....	.15	.30	.54	.35	....	....	....	....	....	.01	....	.24	.26	.19	.02	.18	.04	....	....	....	.12	.14	....	....	3.54
Ritzville	....do	.02	.05	....	....	.05	....	....	.65	*	1.40	....	....	....	....	....	....	....	.23	....	....	1.00	....	....	....	....	....	....	.28	....	....	3.89
Rock Lake	Palouse	....	.06	....	....	....	....	.38	.43	.42	.70	.14	....	....	....	....	....	T.	....	.08	.76	.51	.13	....	....	....	....	....	....	....	....	....
Rosalia	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.05	1.24
Russells Ranch	Yakima	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Scenic Hot Springs	Puget Sound	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.09	T.	.20	.04	8.47
Seattle	....do	T.	.20	....	....	.29	.07	.61	.55	1.69	.80	.02	.01	....	....	....	T.	.10	.09	.81	1.82	.40	.68	....	....	....	....	.09	.02	....	.18	6.37
Sedro-Woolley	....do	.53	.25	.39	....	.39	.34	.42	.18	.25	.25	.01	.18	....	....	....	....	.05	.55	.60	.97	.50	.18	.04	....	....	....	.09	.02	....	.11	2.01
Sixprong	Columbia	....	....	....	....	....	....	.01	.04	.18	.07	....	....	....	....	....	....	....	.22	....	....	.28	.34	.10	....	....	....	.26	.10	.20	....	17.54
Skagit Power Dam	Puget Sound	.44	.46	.57	....	.61	1.16	1.38	.33	.79	2.37	.16	.16	....	....	....	....	....	.49	1.11	2.75	2.70	.79	.64	....	....	....	.30	.04	....	.39	7.43
Snohomish	....do	.22	.50	.13	....	.02	.03	.49	.33	.23	1.55	.11	.38	....	....	....	.01	.02	.42	.65	.20	.16	.75	1.10	....	....	....	.04	....	....	.09	7.43
Snoqualmie Falls	....do	.14	.30	.10	T.	.01	.42	.91	.23	.84	2.40	.17	.08	.01	....	....	T.	....	.37	.58	1.16	2.30	.63	.20	.01	.01	....	....	.03	T.	.10	11.00
Snoqualmie Pass	Yakima	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	T.	.08	.50	.75	.35	.37	.20	....	....	....	.16	....	....	.30	4.34
Snyders Ranch	Columbia	.15	....	....	....	T.	.15	.46	T.	.66	.21	....	....	....	....	....	....	.09	.37	1.54	3.79	2.33	.73	.39	....	.02	.02	.48	.01	.14	.54	17.13
South Bend	Coast	.10	.77	.36	.01	.11	.52	1.31	.25	1.65	1.35	.15	.10	....	....	....	.04	T.	.22	.41	.42	.11	.15	.01	....	T.	....	.24	.10	.05	....	3.71
Spokane	Spokane	.01	.06	....	....	.01	.01	.16	.29	.72	.65	.05	....	....	....	....	....	.04	.17	.17	1.06	1.73	.38	.62	....	....	....	.09	T.	....	.25	8.36
State University	Puget Sound	.04	.15	.13	.01	....	.20	.61	.18	.63	1.71	.15	.04	....	....	....	....	T.	.19	.20	.88	.50	.16	.38	....	....	....	.60	....	....	.37	5.44
Stokes Ranch	Columbia	.21	.11	T.	....	....	T.	.61	....	.83	.40	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Sullivan Lake	Pend d'Oreille	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	.04	.47	.46	.65	1.77	.37	.11	....	....	....	.07	....	.12	.40	8.61
Sumner	Puget Sound	.03	.24	.40	....	.08	.23	.55	.33	.40	1.78	.09	.02	....	....	....	....	....	.17	.06	.01	....	.21	....	....	....	....	.14	.25	.11	....	1.22
Sunnyside	Yakima	....	....	....	....	....	....	.05	.19	.03	....	....	....	....	....	....	.01	.20	.22	.64	2.25	.54	.87	.03	....	....	.04	.11	....	.46	.02	9.65
Tacoma	Puget Sound	.01	.28	....	....	.24	T.	.52	.31	1.47	1.22	.21	....	....	....	....	.20	.54	.14	.92	2.53	.30	1.31	.11	.04	....	....	.32	.38	.23	.71	12.98
Tatoosh Island	Coast	.37	.65	....	....	.84	.29	.76	.13	1.75	.30	.16	T.	T.	T.	....	T.	....	.10	.09	.39	.47	.40	.20	....	....	....	.27	.25	.45	.32	4.79
Tieton	Yakima	....	.06	....	....	T.	.14	.36	.12	1.06	.11	....	....	....	....	T.	....	....	.26	T.	.05	.11	.02	.01	....	....	T.	.02	.01	.14	.06	1.90
Touchet	Columbia	....	T.	....	....	....	.22	.03	.16	.09	.17	.55	....	....	....	....	....	....	.10	1.30	1.20	1.40	.60	....	....	....	T.	.25	.30	.40	....	12.63
Touchet Ridge	....do	....	.43	....	....	....	1.50	1.95	.80	1.40	.30	.70	....	....	....	....	....	T.	.84	.07	....	....	.20	.18	....	....	....	.13	.01	.01	.01	1.67
Trinidad	....do	....	....	....	....	....	....	....	.13	.03	.03	.03	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Twin Sister Lakes	Yakima	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Twisp	Columbia	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tyee	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Upper Clealum Valley	Yakima	....	.29	.02	....	T.	.49	.78	.23	1.35	1.37	.01	....	....	....	....	....	.16	.47	T.	.66	.87	.61	....	....	.06	....	.58	.25	.55	.03	8.78
Vancouver	Columbia	....	.32	.18	T.	.04	.41	.63	.39	.69	2.39	.04	.05	....	....	....	T.	.07	.33	.92	2.07	1.79	1.23	.09	.01	T.	.03	.12	.02	.02	.45	12.34
Vashon Island	Puget Sound	.05	....	....	....	....	....	....	....	.20	.02	....	....	....	....	....	T.	.20	....	T.	.10	....	.25	....	....	....	....	.05	.20	.40	.27	1.80
Wahluke	Columbia	....	....	....	....	....	.11	....	....	....	....	....	....	....	....	....	T.	.16	.18	.32	.27	.22	.17	.54	....	T.	....	.14	....	.22	....	3.35
Wallace	Okanogan	.16	.04	....	....	....	....	.36	....	.46	.06	.05	....	....	....	....	T.	T.	.15	.01	.44	.18	.25	....	T.	.01	....	.03	.11	.10	.01	3.69
Walla Walla	Columbia	....	.02	....	....	T.	.38	.56	.24	.07	.93	.20	....	....	....	....	.05	T.	.30	.10	.05	....	.70	....	....	....	....	2.25	.08	.20	....	....
Waterville	....do	T.	....	....	....	....	....	.12	.10	.62	.09	....	....	....	....	....	T.	T.	.17	.10	.27	.17	.28	T.	....	....	....	.24	.06	.03	.20	2.75
Wenatchee	....do	....	....	....	....	....	.02	.14	.15	.84	.08	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
West Branch	Spokane	....	....	....	....	....	....	.03	.30	.27	T.	....	....	....	....	....	....	.06	.45	.45	.35	....	.33	....	....	....	....	*	.20	....	.05	2.62
Wilbur	Columbia	.10	.03	....	....	T.	....	.03	.30	.27	T.	....	....	....	....	....	....	.20	.55	1.30	2.35	2.95	1.55	....	....	.10	.20	.50	.35	1.00	....	23.25
Yale	....do	....	.65	.40	....	10	2.00	2.70	.75	2.70	2.90	....	....	....	....	....	....	....	....	....	T.	1.40	.32	.15	.11	.03	....	....	....	....	....	6.42
Zindel	Snake	....	....	....	....	1.50	.73	.31	.11	.52	T.	.80	T.	....	....	.44	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Oregon.																															
Albany	Willamette	....	....	.16	....	....	.44	1.24	1.60	.14	.62	1.22	....	....	....	....	....	....	.66	.14	.10	.82	.24	.62	.08	.10	.08	.58	.02	.84	.08	10.68
Ana River	SE. Drainage	....	....	....	....	....	....	T.	.75	....	T.	.41	....	....	....	....	....	.20	.02	....	....	.15	.05	.38	.83	.03	....	.06	T.	....	....	2.88
Ashland	Rogue	....	T.	....	....	....	....	.40	1.20	....	.15	.50	....	....	....	....	....	.25	.45	....	....	....	32	1.60	1.00	....	....	.30	.42	....	....	6.59
Astoria	Columbia	.17	.52	.07	....	.09	.42	1.26	.54	2.09	1.70	.49	.01	....	....	....	....	.13	.44	....	....	....	....	....	....	....	....	.30	.14	....	....	15.85
Bagleys Ranch	Snake	....	....	....	....	....	....	.11	.06	....	.16	....	....	....	....	....	....	.09	....	....	.06	.22	....	.30	....	....	....	.18	....	....	....	1.18
Baker City	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bay City	Coast	....	.45	.30	....	.03	1.32	1.21	.70	1.50	1.80	.20	....	....	....	....	....	.41	.94	1.15	2.10	.95	2.00	.04	....	.44	....	.47	.32	1.75	.30	18.38
Bear Creek	Deschutes	....	....	....	....	....	....	.08	.41	....	....	.39	....	....	....	....	.14	.10	....	....	....	.20	.27	.25	.36	....	....	.19	.94	....	....	3.33
Bear Valley	John Day	....	....	....	....	....	....	.17	.40	.20	T.	.28	....	....	....	....	....	....	.30	....	.15	.70	....	....	....	.20	.50	.50	.70	....	....	4.10
Beach Creek	....do	....	....	....	....	....	....	.60	.73	.25	T.	.92	....	....	....	....	....	....	.35	....	.01	.25	.10	....	.78	....	....	.19	.55	.20	....	4.93
Bellfountain	Willamette	....	.17	.29	.02	....	.77	1.51	1.12	1.00	2.05	.02	....	....	....	....	.30	.63	.05	.61	1.32	1.32	.14	....	.06	....	.01	1.03	1.30	1.33	15.05
Bend	Deschutes	....	....	....	....	....	....	.21	1.02	.10	.06	.01	....	....	....	....	.11	.12	....	....	.03	.39	.52	.48	.35	....	....	.65	.33	....	....	4.38
Big Basin	John Day	....	....	....	....	....	....	T.	.30	....	.30	1.30	....	....	....	....	....	....	.30	....	.10	....	.50	....	.40	....	....	.40	.10	....	....	3.70
Birch Creek	....do	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Black Butte	Willamette	....	.10	....	.40	....	.10	1.80	.70	....	.80	....	....	....	....	....	.30	.50	.25	.45	.25	1.20	.35	....	....	....	....	....	2.05	.90	....	10.15
Blalock	Columbia	....	....	....	....	....	T.	.15	.06	.23	.04	....	....	....	....	....	T.	....	.28	....	T.	.19	.31	.23	....	....	.40	T.	.37	.16	.16	2.58
Blue Mountain Sawmill	Umatilla	....	....	.25	....	....	25	.32	.25	.21	.10	.85	.05	....	....	....	....	....	.40	....	1.70	....	....	1.10	....	....	....	.50	.30	.10	.10	6.48
Buena Vista	Snake	....	....	T.	....	....	....	.01	.04	.04	.01	....	....	....	....	....	....	....	.08	.02	.09	.01	.06	....	T.	T.	.04	.03	T.	....	....	0.43
Burns	SE. Drainage	....	....	....	....	....	....	.61	....	....	....	....	....	....	....	....	.49	....	....	....	.10	.15	.53	....	.50	....	....	.90	.05	....	....	3.33
Burns Mill	....do	....	....	....	....	....	....	.12	.70	.20	.10	.10	....	....	....	....	.40	....	....	....	....	.12	.10	.45	.40	.30	.01	.70	....	.33	....	4.03
Butte Falls	Rogue	....	....	....	....	....	....	.37	2.57	.02	.45	.63	....	....	....	....	.01	.18	.91	.01	.08	.58	.28	1.75	1.04	....	....	1.16	2.35	.20	....	12.59
California Gulch	Umatilla	....	....	....	....	....	....	1.20	1.56	....	....	....	....	....	....	....	....	....	....	....	....	.38	.65	....	.20	....	....	.20	....	.04	....	4.23
Canyon City	John Day	....	....	T.	....	....	....	.08	.39	.05	....	.60	....	....	....	....	....	....	.30	....	.20	.25	.28	T.	.35	T.	....	.15	.49	....	....	3.14
Cascade Locks	Columbia	....	.31	.35	....	T.	.42	1.96	.72	2.78	1.40	.60	.02	....	....	....	....	....	1.25	1.15	2.31	.62	1.62	.61	T.	.26	.21	.10	1.00	.96	.15	18.80
Cascadia	Willamette	....	.37	.15	....	....	.63	1.90	1.68	.32	1.02	.34	....	....	....	....	....	....	1.12	.19	.85	1.13	.87	1.17	.11	....	....	1.16	1.94	.06	....	15.01
Cazadero	....do	....	.30	.13	....	....	.38	1.37	.82	.88	1.60	.32	T.	....	....	....	.10	.13	.25	.10	1.02	.73	.37	....	.20	....	....	.50	.41	.54	....	10.15
Christmas Lake	SE. Drainage	....	....	....	....	....	....	.10	.43	.06	....	.37	....	....	....	....	....	....	.33	.02	....	.20	.18	.30	.49	....	....	.11	.23	.11	....	2.93
Columbia Mine	Snake	....	T.	T.	....	....	....	.31	.49	.30	.15	.45	....	....	....	....	....	....	.30	....	.40	.10	.40	.70	.40	.40	....	.60	1.10	.20	....	6.30
Condon	John Day	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	T.	.55	.40	....	....	1.59	.34	.70	....	.24	....	1.29	2.61	.85	....	14.52
Coquille River	Coast	....	.20	.10	....	....	.55	1.26	....	.74	3.10	....	....	....	....	....	....	.02	.90	.02	.92	1.60	.44	.92	.15	.20	....	.61	1.01	.23	....	11.16
Cornucopia	Snake	....	....	.09	....	....	....	.92	.45	.71	.65	1.10	.22	....	....	....	....	.60	.17	....	.06	.91	.49	.37	....	.61	.98	1.01	.04	....	.05	10.45
Corvallis	Willamette	.17	.03	....	2.00	.74	.20	1.15	.86	.01	....	....	....	....	....	....	....	....	.30	....	.50	.06	.60	.60	.30	T.	T.	.60	.60	.20	....	3.90
Cracker Creek	Snake	....	T.	T.	....	....	....	.01	.04	.01	T.	.08	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Crescent	Deschutes	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.20	....	.06	.09	.30	.12	.24	.03	....	.18	.24	.03	....	2.54
Dayville	John Day	....	T.	....	....	....	....	T.	.35	.09	.01	.60	....	....	....	....	....	....	.28	.72	.11	1.96	1.06	1.74	.56	....	.03	....	1.70	1.70	2.01	....	24.06
Deadwood	Willamette	....	.19	.17	....	....	.92	3.15	1.20	2.76	3.78	.02	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Diamond H	SE. Drainage	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.61	.34	1.12	1.94	.69	.17	....	.02	.02	.26	.08	.38	.10	10.59
Doraville	Columbia	.03	.28	.17	....	.01	.10	.79	.36	1.05	1.95	.03	.07	.02	....	....	....	.11	.47	.15	.05	.68	.38	1.05	.02	....	....	1.07	2.33	.99	T.	11.20
Drain	Umpqua	....	.13	....	....	.41	1.34	....	.92	.11	.63	.16	T.	T.	....	....	T.	.07	.25	T.	T.	.26	.81	.22	T.	.03	T.	.50	.28	.34	.02	3.83
Dufur	Columbia	....	....	T.	....	....	.08	.13	.18	.61	.05	....	....	....	....	....	....	....	.20	.80	.10	.55	2.00	.10	.10	....	.30	....	.80	....	.10	9.05
Duncan	Umatilla	....	....	....	....	....	.20	.25	2.25	.40	.15	.75	....	....	....	....	....	....	.22	....	.20	.16	.16	....	....	....	....	....	.21	.09	.11	1.99
Echo	....do	....	T.	....	....	....	.11	.16	.19	....	.20	.18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Elkhorn Ranch	Coast	....	....	....	....	....	....	T.	.28	.13	.14	.13	.06	....	....	....	....	....	.17	....	T.	.08	.25	.17	....	....	....	.20	.14	.10	.10	1.95
Ella	Columbia	....	....	....	....	....	....	.30	.02	1.42	T.	.15	.05	....	....	....	....	....	.02	.01	.20	.05	....	.30	1.00	....	....	....	.60	.50	....	4.62
Embody	Willamette	T.	....	....	....	T.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

TABLE 2.—*Daily precipitation for November, 1910. District No. 12*—Continued.

Stations.	River basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.
Oregon—Continued.																																
Eugene	....do			.15	.01		.11	.80	2.00	.12	.14	.93	.40						.62	.27	.01	.60	.41	.45				.40	1.68	1.41		10.51
Fairview	Coast							2.30	T.		2.20	T.	T.					1.32	1.80	1.65	.42	1.43		1.28				1.70	2.12	1.16		17.38
Fall City	Willamette		.24	.31			.31	2.03	.35	2.50	2.80	.19	.01						.51	.66	2.71	.29	2.00	.37		.02		1.14	.78	1.32	.05	18.59
Fir Glen	Coast						.06	1.02	1.46	.07	.59	.21						.24	.63	.06	.29	.98	.55	1.96	.07	.04		2.02	3.98	.75		14.98
Florence	....do		.26	.23	T.	.01	1.17	1.92	.99	1.25	2.75							.44	.74	.07	1.20	.80	.93	.03		.43	T.	1.29	1.09	1.70		17.30
Forest Grove	Willamette	.19	.15			.21	1.11	.52	1.55	2.28	.03								.82	.88	1.02	1.87	1.02	.13		.18	.34	.31	.21	.90	.04	13.76
Fort Rock	Interior								.50			.30						.25	.02		.20	.07	.52	.50			.94	.10				3.40
Galice	Rogue		T.					.65	1.96	.50	.33	.10					T.	.20	.35	.05	1.05	1.00	.80	1.35	.45	T.		2.20	5.00	.75		16.74
Gardiner	Umpqua			.41			1.34	2.30	1.18	.70	3.80	.06						1.40	.84	.12	.94	.97	.70	.60				1.77	2.60	1.64		21.37
Glencoe	Columbia							.56		.11		.13											.60					.16	.16		.05	1.77
Gibbon	Umatilla			.05			.65	.55	1.00	.22		.98									1.00	.86						.28	.18			5.77
Glendale	Umpqua		T.				T.	.08	.12	.14	.09								.36	.11	.23	.18					1.21	.30	.10	T.	2.92
Glenora	Coast		.40	.24		.20	1.05	4.00	.48	4.25	4.05	.16						.10	1.26	2.69	7.00	4.18	1.97	.55		.12	.20	.22	.40	1.50	2.00	37.02
Gold Beach	Rogue		.09				T.	1.41	.88	.13	2.40							.30	.15		.65	1.26	.62	1.55	.32			1.45	4.10	2.18		17.49
Granderonde	Coast	.01				.04	.09	1.45	1.65	.40	.04				.07	.09	1.05	.04	.06			.01		T.	T.	.07	.06	1.00	1.45	1.50	1.04	10.12
Granite	John Day																															
Grants Pass	Rogue							.35	1.24	.03	.06	.24						.28	.39		.02	.55	.17	.97	.78	.02		1.94	3.55	.67		11.26
Grass Valley	John Day							.33	.44	.03									.25		.10	.40						.90	.28			2.73
Greenhorn	Snake			.03	T.			.67	.79	.58		.82						T.	.58		.52	.53	.41	.93	.45	.01	.03	.62	1.43	.61		9.01
Grindstone	Deschutes																															
Gumboot	Snake																															
Gurdane	Columbia		T.				T.	.02	.80	.15	.02	.50							T.		.26	.36	.13	.18	.06			.05	.02		2.55
Happy Home	Umpqua			.10					.80	.44	.60	1.06	.40					.32	.48	.85	.44	.80	1.04	1.60	1.90		.30	2.80	5.40	1.90		21.23
Hay Creek	Deschutes							.37	.65	.06	.04					T.			.22			.39	.25	.26	.15	.02		.20	.91	.30		3.82
Hazeldell	Willamette		.15					.40	1.80	.30	.18	.50						.40	.10	.15	.46	.38	1.70	.38	.10	.41	T.	2.65	1.27			11.33
Head Works	....do		.43	.35			.50	1.34	.53	1.28	1.94	.12	.19					.66	.45	.60	.56	.66	.28			.60	.08	.85	.50	.79	.07	12.78
Heppner	Columbia		.01				.06		.54	.15	.12								.20		T.		.10	.04	.03	.02		.02	.25	.11	.02	1.67
Hermiston	Umatilla						.15	.09	.10	.07	.04	.09							.18		.10	.30	.15	.07				.01	.20	.08	.10	1.73
Hilgard	Grande Ronde			.10					.15	.35	.07	.10							.01		.60	.40	.40	.40	.10			.20	.20			3.08
Hood River	Columbia		.10					.80	.50	1.50	.40							.20		.40	.35	.60	.80	.30	.05	.05		.85	.15	.60	.05	7.70
Hoover	Willamette			.29			.56	2.69	2.03	1.41	.76	.26	.05						.79	.22	1.15	1.62	1.28	.96	.09	.18		1.50	1.20	1.71		18.85
Howardville Station	Grande Ronde		.09	.03				.44	.81	.47	.06	.75	.10						.26	.02	.38	.66	.02	1.04	.15	.05	.04	.35	.38	.12		6.22
Huntington	Snake																															
Ibex Mine	John Day			T.				.08	.35	.24	.07	.54	T.					T.	.30	T.	.31	.37	.20	.88	.28	.03	.28	.40	.74	.19	T.	5.26
Ironside	Snake									.25		.38	.05					.05	.27		.05	.30		.40	.35			.50	.30	.05		2.95
Jacksonville	Rogue							.32	1.53			.57						.24	.42			.24	.20	1.35	.94			.88	2.50	.14		9.33
Joseph	Grande Ronde								.35	.25	.30	.79									.10		.20	.50	.30	.20			.40			3.39
Klamath Agency	Klamath							*	*	1.40								*	.70		*	.30	.50	*	1.40		*	1.20	1.30			6.80
Klamath Falls	....do							T.	1.45			.23						.20	.21		.04	.21	.35	1.26	.78			.20	.24	.01		5.18
La Grande	Grande Ronde							.10	.72	.06		.53							.12		.29	.30	.03	.47	.12	T.	.04	.03	.18	.12	.03	3.14
Lakeview	Pitt																															
Lilyglen	Rogue																															
Long Creek	John Day							.42	.71	.21	.02	1.01					T.	.01		.09	.11	.40	.42	T.	.02	.15		T.	4.18			7.75
Long Valley	Pitt								.75	T.	T.	.16	.03				T.	.10	.47	*	*	*	*	*	*	2.57			.70			4.78
McKenzie Bridge	Willamette		.16	.34			.11	1.96	1.65	.46	.60	.38	.02						.63	.15	1.10	1.22	1.30	1.99	.20			1.07	3.38	1.37	.02	18.17
McMinnville	....do		.02	.20			.24	.94	.30	1.59	1.42	.02						.15	.44	.19	.64	1.12	.79	.04		.01		.61	.46	.65		9.83
Madras	Deschutes																															
Maury	....do					T.		.25	.40	.04	.29		.27						.71		.29	.21	.40		.58			.74	1.50		.17	5.85
Meacham	Umatilla						T.	.10		.90	.70	.30					.30	.10	.10	.10						.20	.30	.20	.20	.10	.10	3.70
Merrill	Interior Drainage								.80			.30							.40					2.00	.70							4.20
Metolius	Deschutes							.60	1.21	.38	.24								.23	.08	.28	.98	1.12	.70	.33			.83	1.59	.66	.03	9.26
Mikkalo	John Day							.62		.12	.07								.24				.26	.14				.15		.42	.07	2.09
Miller Prairie	Columbia								.40	.62	.19	.47	.40									.70							.15			2.93
Miramonte Farm	Willamette		.32			T.	.66	1.00	.28	1.32	1.52							.19	.64	.25	.22	.60	.57	.11		.09		.62	.40	.73	.01	9.53
Monroe	....do		.12	.15			.26	1.70	.90	.94	.40	.12						.42	.30	.03	.32	1.00	1.35	.25	.07			.92	1.20	1.40	.03	11.88
Mountain Home	Columbia	.02	.48	.38		.70	.38	1.08	.55	1.78	2.22	.05							.55	.70	2.22	2.50	.78	.23		.08		.21		.35		15.26
Mount Angel	Willamette		.31			.05	.65	1.05	.85	.75	2.72	.12						.10	.71	.25	.58	.77	.11	.10		.02		.70	.46			10.30
Mount Hood	Columbia		.15			T.		1.10	1.08	.91	.15							.18	.40	.38	.90	.95	1.65			.24		.53	.45	.35	.13	9.55
Mountain Park	....do		.17	.50			.05	1.90	.98	2.10	.95	.12						.07	.77	.22	2.00	2.00	1.90	.47		.50	1.07				.17	16.94
Mountain Ranch	Rogue								2.00		.95						25	.50				.48	.60	1.90	1.08			2.38	3.20	.30		13.64
Musick	Umpqua		.22	.10				3.03	.40	.12	.43	.49	.02					.10	.92	.48	.90	1.50	2.20	.40	.50		1.00	1.96	.60	1.55		16.92
Newport	Coast		.30	.08			.85	1.50	.35	1.04	2.00	.05						.30	.55	.33	.73	.14	.64	.05		.44	.09	.48	.30	1.00		11.22
Ochoco	Deschutes						.20		.77	.04	.06	.17						.35				.27	.34	.30	.18		.64	1.72	.25			5.29
Ochoco Creek	....do							1.10	.09	.17								T.	.30		.03	.29	.12	.72	.19		.30	2.05				5.36
Owyhee	Owyhee								T.	.15		.42							.32		.15			.30	.05			.10	.36	.22		2.07
Paisley	SE. Drainage							*	.64			.46										.06		*	1.00	.67		T.				2.83
Paulina	Deschutes							.11	.56	.36	.03	.41						.06	.23		.24		.34	.20	.29			.51	.25	.16		3.75
Pendleton	Umatilla																															
Persist	Rogue		T.					.46	1.96		.25	.56						.44	.85	.02	.18	.82	.56	1.23	.85			1.25	3.13	.43		12.99
Pilot Rock	Umatilla	.02	.02	.01				.13	.73		.02	.94							.23		.24	.14	.02	.15	T.		T.	.05	.15	.15	.10	3.10
Plush	SE. Drainage																															
Pompeii	Columbia		.27	.48		.55	1.84	1.04	1.40	.47	.25	.10						.05	.97	.60	1.38	1.20	1.70	1.35	T.	.20	.10	.62	.77	.72	.11	16.17
Portland	Willamette		.15	.01		.01	.50	.67	.16	1.14	1.52	.01					T.	.40	.40	.07	.45	.76	.58			.03	.20	.40	.18	.60		8.24
Post	Deschutes							.25	.43	.18	T.	.42							.18		.15	.20	.28	.30	.32			.11	.62	.07		3.51
Power House	Walla Walla		.07					.22	.07	.10									.02		.02	.44	.24	.42	T.	.08		T.	.55	.10	.06	2.39
"P" Ranch	SE. Drainage																															
Prineville	Deschutes							.06	.62	T.						T.		T.	.05	.30		.34	.19	.28	.03			.14	1.07	.16		3.24
Prospect	Rogue		T.					.90	2.05	.06	.31						T.	.31	.70	.08	.32	1.10	.40	1.90	.93	.20	3.30	.60				13.16
Ramsey	Columbia						.03	.10	.16	.58	.09							.06	.33			.32	.77	.27		.05		.46	.28	.20	.07	3.77
Range	John Day		T.	T.				.35	.30	.45	T.	.86	T.					.20	T.			.03		.02	.03	.02	T.	.02	.08	.02		2.38
Ray Creek	Columbia						T.	.10	.47	T.	.17							.18			T.	.20	.14	.09	.04	T.			.35	.05		1.79
Reston	Umpqua		.01	T.			.18	.90	1.23	.05	.51	.13						.22	.54	.03	.32	.82	.34	1.31	.11	.03		2.54	3.00	.75	.03	13.05
Richland	Snake						.38	.05	.07	T.	.18	.08							.12		.22	.30	.10	.30	.15			.30	.20	.15		2.60
Riverdale Ranch	Deschutes		T.			.16		.35	.02		*	.38							.32		.07	.14	.30	*	.64			*	.74			3.12
Riverside	Malheur																															
Rock Creek	Willamette		.32	.20			.72	1.40	1.45	1.42	3.11	.22						.18	.72	.32	1.35	1.21	1.90	.25				1.27	.89	1.61	.02	18.56
Roseburg	Umpqua	.01	.07	.02			.22	.79	.78	.02	.42	.01					.02	.51	.16		.01	.55	.55	.48	.14	.06	T.	2.50	1.73	.10		9.15
Rosland	Deschutes		.01					.12	1.18	.08	.10	.10					T.	.14	.28			.31	.17	.70				.90	.50			4.39
Salem	Willamette		.18				.58	.64	.40	.84	1.82	T.						.14	.58	.03	.08	.52	.86	.08		.04		.74	.02	.46	.02	8.03
Seneca	Interior								.12			.48							.50				.28		.67	.10			.99		.30	3.44
Silver Lake	SE. Drainage																															
Siskiyou	Rogue							.18	2.47		.45	.40						.38	.58		.10	.48	.52	1.47	2.18			.79	1.12	.28		11.40
Sisters	Deschutes							.28	1.06	.11	.12	T.						.17			T.	.88		1.20	.53				2.20	.28		6.83
Sparta	Snake																															
Stafford	Willamette		.36			.01	.16	1.46	.18	1.52	2.14	.44						T.	.80	.17	.36	.80	.75	.18		.14		.64	.39	.76	.03	11.29
Starkey	Grande Ronde		.08					.20	.30	.35		.84							.10		.20	.26	.13		.42	.01		.03	.31	.13		3.36
Sugar Creek	Deschutes							.23	.33	.21		.67							.30	.08		.20	.34		.60			1.16				4.12
Summit	Willamette		.25	.26	T.		.93	1.35	.63	1.07	2.19	.02	.12					.05	.91	.10	.61	.30	1.14	.20		.19		.62	.88	1.13		12.95
Summit Prairie	Deschutes							.27	.37	.23	.04	.45							.22		.06	.15	.52	.16	.30			.48	.89	.14		4.28
Susanville	John Day			.02				.11	.51	.08	T.	.93							.37		.20	.19	.24	.20	.25	.03	.19	.44	.26			4.02
Tamarack	....do							.50	.70		.20	.20						.16		.67		.90						.67				4.00
Telocaset	Snake																															
The Dalles	Columbia			T.			.02	.31	.16	.53	.09								.37	.05	.05	.43	.48	.50			.03	.44	.28	.35	.09	4.18
Tinroof Cabin	Umatilla		T.				T.	.58	.80	.17	T.	.36							.20		.30	.40	.15		.16	.16		.15	.28	.08		3.79

TABLE 2.—*Daily precipitation for November, 1910. District No. 12*—Continued.

Stations.	River basins.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Oregon—Continued.																															
Toledo	Coast						1.80	1.45	.95	1.20	1.30	.15							.70	1.40		1.10	1.15			.70		.80		2.00		14.70
Trask	do		1.00		.02	.51	2.00	.42	.89		4.30	.74	.35						.64	.70	3.40	4.40	1.30	2.10	.10	1.10	.30	.20	.90	.20	.80	26.37
Umatilla	Columbia						.04	.25		.12	.20							.20				.31	.21				.01			.42		1.76
Unity	Snake						.03		.17	.18	T.	.39	.05					.04	.20		.02	.24	T.	.11	.53				.33	.08		2.37
Vale	Malheur							.10	.23	.04		.31		.13					.29	.02	.05	.20	.04	.19	.29	.10		.20	.39	.04	.03	2.65
Valley Falls	SE. Drainage								.29	T.		.28	.23					.13				.11	.50	.60	3.45			.86	.01			6.46
Van	Malheur																														
Wallace Orchard	Willamette		.24			T.	.60	.76	.27	1.24	1.91	.68	.03					.17	.46	.03	.20	.71	.77	.06		T.		.75	.50	.43		9.21
Walloupa	Grande Ronde			.29				.14	1.02	.23	.15	.80	.04		.01				.16		.53	1.05	.09	1.01	.10	.04	.03	.28	.13	.13	.05	5.99
Wallowa	do		T.	.33				.14	.86	.18	.05	.67	.04						.26		.14	.17	T.	.09	.13	.07	.15	.19	.08	.02		3.57
Wamic	Deschutes						.10	.20	.25	.28	.20	.28								.20			.50				.55	.45	.41	.48		4.36
Warmspring	do							.22	.78	.16	.06								.27			.36	.38		.14		.10	.29	.80	.48		4.04
Wasco	Columbia						T.	.35	.12	.43	.20	.15							.40			.20	.30	.25				.21	.30	.30	.06	3.27
Welches	do		.50	.18			.60	1.30	1.75	1.30	1.30							.40	.67	.60	2.64	1.45	2.00	.75		.51		.20	.80	.70		17.65
Weston	Walla Walla		.03	.05			.20	.30	.50	.15	.07	.75	T.						.25		.10	.30	.05	.25	T.	.20		.19	.18	.10	.10	3.77
Williams	Rogue																														
Yonna	Interior Drainage							.05	.80	T.		.45						.20	.33		T.	.25	.58	1.20	1.74			.85	.07			6.52

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 12, Columbia Valley.*

Date.	Montana.						Idaho.																			
	Kalispell.		Missoula.		Afton, Wyo.		Boise.		Bonners Ferry.		Hot Spring.		Lewiston.		Mackay.		Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	47	33	45	33	55	24	64	37	50	30	66	34	57	43	60	29	55	20	60	33	53	33	.....	.....	48	30	49	38
2	56	37	60	37	63	21	72	38	50	37	73	31	60	41	60	26	52	26	66	36	57	24	.....	.....	60	25	61	36
3	48	34	55	34	67	30	54	33	50	30	74	39	57	35	54	34	49	32	59	35	51	28	.....	.....	52	35	46	32
4	48	27	42	30	43	10	50	26	52	22	52	25	53	31	45	31	38	15	48	18	47	18	.....	.....	43	15	44	31
5	42	24	49	24	43	9	57	27	44	26	58	19	53	34	47	23	49	15	53	20	47	26	.....	.....	46	19	49	29
6	51	37	52	37	61	18	56	36	51	35	62	39	54	47	47	22	50	34	61	37	48	27	.....	.....	53	24	52	38
7	50	40	53	34	56	23	63	44	51	41	68	42	55	47	55	23	50	39	60	41	54	36	.....	.....	56	26	50	42
8	50	34	50	38	57	43	59	41	50	31	64	30	50	45	47	27	49	35	57	39	53	34	.....	.....	50	42	47	35
9	40	32	43	33	50	25	57	34	42	30	64	33	47	38	47	24	45	27	55	36	40	22	.....	.....	43	22	40	32
10	39	32	52	34	60	33	68	46	49	30	67	47	53	46	46	30	48	32	64	44	54	33	.....	.....	59	32	49	35
11	47	38	51	41	59	22	61	41	51	40	69	50	50	43	45	29	49	30	64	45	50	30	.....	.....	60	32	47	40
12	48	34	45	38	55	29	45	34	44	29	58	39	49	37	44	38	45	32	54	38	50	40	.....	.....	53	40	47	35
13	40	24	44	22	49	25	42	28	40	18	45	30	47	33	43	36	45	34	42	30	48	27	.....	.....	50	33	.....	.....
14	40	23	42	22	54	15	43	37	43	19	48	39	39	30	43	21	42	24	44	27	48	22	.....	.....	53	23	37	22
15	36	26	37	20	47	15	41	31	45	24	45	34	41	35	45	20	41	25	34	30	38	21	.....	.....	44	24	30	23
16	32	27	35	24	41	19	41	30	40	24	46	31	44	37	40	19	32	24	35	22	34	27	.....	.....	31	27	36	23
17	32	28	33	26	36	16	43	34	36	27	48	33	47	37	37	20	35	29	37	23	36	26	.....	.....	32	21	39	30
18	36	30	37	28	45	26	42	34	35	29	46	36	42	34	40	20	37	32	46	31	45	32	.....	.....	38	30	38	31
19	40	26	47	29	34	24	45	32	40	25	48	34	44	31	41	24	38	23	38	28	44	29	.....	.....	33	11	37	31
20	37	32	57	30	39	12	48	36	40	31	50	30	50	43	38	18	36	28	44	27	44	29	.....	.....	32	21	40	33
21	49	34	47	34	38	30	54	40	44	33	60	45	57	44	43	15	41	32	44	35	49	32	.....	.....	35	28	46	38
22	41	34	44	31	40	25	47	34	51	46	58	37	46	38	40	21	38	23	44	35	41	26	.....	.....	37	28	44	34
23	40	33	43	31	46	24	50	37	46	30	56	40	51	35	48	17	41	32	50	37	36	28	.....	.....	38	28	40	33
24	34	27	37	28	48	31	44	33	40	21	50	35	40	34	45	20	33	24	57	33	33	15	.....	.....	42	29	.....	.....
25	29	26	33	27	51	35	34	30	30	24	52	33	44	32	40	21	32	26	52	26	34	18	.....	.....	47	23	42	25
26	32	18	31	12	47	8	34	20	37	18	52	19	41	31	46	19	29	8	27	15	32	11	.....	.....	35	11	32	23
27	24	19	25	11	26	−5	39	30	33	30	40	22	40	31	39	23	26	4	34	15	27	−12	.....	.....	25	−2	31	20
28	30	24	30	22	36	24	48	39	55	25	50	32	41	35	42	20	40	25	47	32	35	17	.....	.....	37	15	35	29
29	34	26	36	26	40	32	51	35	36	22	57	36	44	38	41	29	37	32	51	32	35	25	.....	.....	38	32	36	29
30	34	29	40	26	39	23	46	30	37	21	52	28	51	37	44	19	36	29	44	27	33	26	.....	.....	40	28	42	32
Mns.	40.2	29.6	43.2	28.7	47.5	22.2	49.9	34.2	43.7	27.9	55.9	34.1	48.4	37.4	45.1	23.6	41.3	26.4	49.0	30.9	43.2	24.9	.....	.....	43.8	25.1	42.4[b]	31.4[b]

Date.	Washington.																									
	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.		Tatoosh Island.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	56	47	51	47	48	38	56	45	52	46	58	51	66	38	70	42	53	46	60	52	65	42	48	42	62	49	53	50
2	56	44	54	46	50	40	64	49	59	44	54	44	59	33	69	36	55	41	53	45	61	38	60	36	53	45	52	42
3	54	35	50	40	48	32	50	36	58	35	52	46	58	29	59	29	49	34	50	46	58	42	52	38	52	43	52	43
4	55	42	48	31	52	22	52	41	53	31	55	42	54	27	56	21	46	32	49	39	54	28	52	34	49	37	49	44
5	54	43	47	38	43	23	55	33	47	34	50	47	43	27	59	26	52	40	49	42	52	31	49	31	49	38	52	45
6	55	48	52	46	56	34	50	32	62	33	51	49	54	28	54	35	56	46	55	47	62	44	53	46	56	46	53	50
7	55	44	52	45	54	42	50	45	61	34	52	48	65	44	59	45	52	37	54	44	64	46	57	46	57	44	55	41
8	49	45	48	40	54	30	49	35	50	35	50	43	50	36	57	35	47	31	46	41	53	41	48	35	45	40	48	41
9	56	36	42	39	44	32	41	36	39	32	53	43	42	30	52	30	44	34	53	40	47	34	41	37	57	37	56	39
10	52	42	54	40	42	32	51	41	43	32	53	44	46	34	54	35	53	40	55	46	56	34	54	38	58	47	54	44
11	53	36	52	41	48	38	48	39	51	37	51	45	52	35	49	39	48	37	52	44	54	40	48	39	53	42	51	46
12	52	33	48	37	42	27	46	38	44	30	51	40	52	26	41	27	47	31	50	39	51	29	43	36	50	36	47	42
13	44	32	45	31	44	32	49	29	38	33	48	40	46	26	43	21	43	30	46	36	45	30	45	33	44	31	47	43
14	56	36	50	33	44	26	57	34	48	33	53	45	48	31	44	22	50	32	50	41	45	33	35	26	52	38	48	44
15	48	31	50	30	35	22	51	27	39	30	51	43	42	29	39	30	48	32	48	36	42	34	35	29	46	33	52	44
16	52	37	44	32	34	29	43	30	38	33	47	44	38	34	35	30	44	37	46	36	37	33	36	31	45	37	49	44
17	49	39	48	38	38	30	52	34	37	31	50	42	39	31	36	30	44	41	48	42	41	28	38	32	49	39	47	43
18	50	38	49	41	37	32	46	39	44	32	50	42	36	32	42	30	47	35	47	40	42	32	38	33	47	42	48	43
19	52	41	46	41	38	32	43	37	38	32	50	47	44	30	56	40	45	35	48	43	48	35	43	34	51	42	52	44
20	53	51	52	40	53	32	59	40	37	32	52	48	58	36	53	34	51	43	55	47	51	34	47	36	58	49	53	49
21	54	34	48	43	55	42	50	41	53	36	52	43	58	45	56	28	49	38	55	44	52	41	52	39	55	42	50	49
22	53	40	43	38	55	29	44	39	47	32	53	44	45	30	54	27	52	35	51	42	46	35	44	36	53	42	49	42
23	48	39	48	40	50	30	50	35	45	32	50	43	52	32	46	25	49	31	50	40	47	37	45	33	50	37	49	41
24	47	36	46	29	38	32	49	21	36	26	47	35	38	29	46	21	44	28	41	32	48	34	38	29	39	28	46	41
25	49	41	41	26	33	23	38	24	37	22	42	37	42	22	43	12	43	30	39	33	47	27	35	30	38	30	45	40
26	46	34	43	27	32	26	49	30	30	19	44	38	40	20	45	15	42	27	48	35	41	28	34	28	46	34	44	39
27	44	31	38	32	35	28	42	36	36	25	47	36	38	30	46	24	41	35	47	37	36	31	35	30	48	36	46	36
28	51	36	40	33	38	26	42	34	36	26	47	42	38	29	42	26	46	32	48	41	35	31	36	30	50	39	49	41
29	47	36	44	36	39	30	43	31	33	26	53	45	35	32	37	31	44	36	48	41	57	32	37	32	46	35	48	42
30	50	42	48	41	35	32	49	35	38	31	57	44	38	33	38	30	47	43	52	44	54	34	40	35	49	40	53	44
Mns.	51.3	39.1	47.4	37.4	43.8	30.8	48.9	35.5	44.3	31.8	50.8	43.3	47.2	31.3	49.2	29.2	47.7	35.6	49.8	41.2	49.7	34.6	43.9	34.5	50.2	39.3	49.9	43.0

TABLE 3.—*Maximum and minimum temperatures at selected stations, November, 1910. District No. 12*—Continued.

Date.	Oregon.																							
	Walla Walla, Wash.		Ashland.		Baker City.		Eugene.		Gold Beach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.		Vale.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	68	48	63	40	.....	.....	60	38	72	40	69	41	68	43	63	43	68	34	68	39	69	38	64	32
2	66	43	62	40	.....	.....	54	39	68	43	68	44	66	46	62	46	66	36	66	41	68	39	62	31
3	57	41	57	34	.....	.....	53	34	63	35	63	36	63	35	58	34	63	34	63	36	63	36	58	30
4	54	36	53	33	.....	.....	44	34	58	36	58	35	58	35	54	34	58	34	58	35	58	35	54	30
5	60	29	53	31	.....	.....	58	34	61	36	61	36	61	36	58	36	61	36	61	36	61	36	58	32
6	56	40	55	41	.....	.....	51	39	58	44	58	44	58	44	56	44	58	44	58	44	58	44	56	39
7	54	43	54	46	.....	.....	57	46	56	50	56	50	56	50	56	50	56	50	56	50	56	50	54	46
8	52	46	52	44	.....	.....	54	46	56	50	56	50	56	50	56	50	56	50	56	50	56	50	54	46
9	57	38	56	36	.....	.....	58	38	58	42	58	42	58	42	58	42	58	42	58	42	58	42	56	38
10	58	38	58	39	.....	.....	60	45	60	46	60	46	60	46	60	46	60	46	60	46	60	46	58	42
11	51	41	49	40	.....	.....	54	45	56	46	56	46	56	46	56	46	56	46	56	46	56	46	54	42
12	51	37	49	36	.....	.....	53	38	54	38	54	38	54	38	54	38	54	38	54	38	54	38	53	38
13	46	29	46	26	.....	.....	50	34	52	36	52	36	52	36	52	36	52	36	52	36	52	36	50	34
14	46	34	46	33	.....	.....	50	34	52	36	52	36	52	36	52	36	52	36	52	36	52	36	50	34
15	46	34	46	31	.....	.....	50	34	52	36	52	36	52	36	52	36	52	36	52	36	52	36	50	34
16	46	34	46	34	.....	.....	50	34	52	36	52	36	52	36	52	36	52	36	52	36	52	36	50	34
17	42	34	45	36	.....	.....	50	36	52	38	52	38	52	38	52	38	52	38	52	38	52	38	50	36
18	47	32	46	33	.....	.....	50	36	52	38	52	38	52	38	52	38	52	38	52	38	52	38	50	36
19	52	32	52	35	.....	.....	54	36	56	38	56	38	56	38	56	38	56	38	56	38	56	38	54	36
20	52	46	53	41	.....	.....	57	43	58	46	58	46	58	46	58	46	58	46	58	46	58	46	56	43
21	62	44	57	45	.....	.....	60	46	62	48	62	48	62	48	62	48	62	48	62	48	62	48	60	46
22	62	44	60	46	.....	.....	62	48	64	50	64	50	64	50	64	50	64	50	64	50	64	50	62	48
23	61	44	61	46	.....	.....	62	48	64	50	64	50	64	50	64	50	64	50	64	50	64	50	62	48
24	60	42	60	44	.....	.....	62	48	64	50	64	50	64	50	64	50	64	50	64	50	64	50	62	48
25	62	42	62	44	.....	.....	62	48	64	50	64	50	64	50	64	50	64	50	64	50	64	50	62	48
26	43	32	38	23	.....	.....	47	32	50	36	50	36	50	36	50	36	50	36	50	36	50	36	48	32
27	43	31	44	25	.....	.....	48	37	50	41	50	41	50	41	50	41	50	41	50	41	50	41	48	37
28	35	32	38	26	.....	.....	46	36	50	40	50	40	50	40	50	40	50	40	50	40	50	40	48	36
29	37	32	37	27	.....	.....	46	36	50	40	50	40	50	40	50	40	50	40	50	40	50	40	48	36
30	39	34	39	30	.....	.....	47	37	50	41	50	41	50	41	50	41	50	41	50	41	50	41	48	37
Means	50.3	37.5	51.5	30.9	.....	.....	52.0	39.4	55.6	41.6	52.1	34.8	55.9	41.7	51.7	41.8	50.0	28.5	52.8	39.1	49.1	27.3	49.3	29.9

WEATHER, FORECASTS, AND WARNINGS FOR THE MONTH.

By EDWARD H. BOWIE, in charge Forecast Division.

A series of barometric depressions of unusual intensity passed eastward from the Atlantic Ocean over the British Isles to Europe and thence to Siberia from the 1st of the month until the 18th, after which date the pressure fluctuations over these regions were of moderate intensity. These disturbances caused heavy and continued rains over practically the whole of Europe and floods in the rivers of France and Germany. Gales were frequent and destructive off the west coast of Europe and over the Mediterranean Sea. During this period the pressure changed decidedly from day to day over eastern Siberia, and, except from the 1st to 3d, it was decidedly above the normal in the Icelandic area. The Atlantic area of high pressure during the time of the stormy weather over Europe was ill defined and unsteady, as shown by the daily reports from the Azores. The Bering Sea low was south of its normal position during the first two decades of the month, and a number of violent storms were reported from the southern coast of Alaska; in the interior of Alaska, the pressure ruled high and unusually low temperatures for the season prevailed. High pressure again set in over Alaska following the 23d, which was preceded by abnormally low pressure from the 19th to 22d. Abnormally high pressure prevailed over the interior of Asia from the 13th to the close of the month, and from the 25th to the 30th it was above 31 inches. The highest pressure reported was 31.52 inches at Ekaterinburg on the 26th.

In the United States the temperature for the month was below normal from the Mississippi Valley eastward, while to the westward it was above normal. In California and in the reigon from the Plains States eastward precipitation was generally below normal for the season, except in scattered localities; elsewhere precipitation was above the normal, in portions of Oregon being as much as 4 inches in excess. In the Central Valleys precipitation ranged from 1 to 4 inches less than normal.

The following forecast was issued Sunday, October 30:

A general reaction to higher temperature is indicated for the eastern half of the country during the next three days, and moderate temperature will continue over the Eastern and Southern States thereafter until the close of the week. A disturbance will reach the Pacific States by Tuesday, pass eastward over the Middle West during the middle of the week and reach the Atlantic States by Friday. This disturbance will be attended by unsettled weather and rains, and it will be followed by lower temperature. Except for a short period of unsettled weather and rains attending this disturbance, the weather will be generally fair during the week.

A distance of moderate intensity appeared in the Northwest at the close of October and moved thence to the St. Lawrence Valley by the night of the 2d, attended by rain and snow in the Great Lakes region, the Ohio Valley, and the Middle Atlantic and New England States. On the night of the 2d, a disturbance began to develop off the South Atlantic coast, whence it moved northward, and on the 3d its center was off the New Jersey coast and on the 4th off Cape Cod. This disturbance caused heavy precipitation on the 3d and 4th in the Middle Atlantic and New England States, and there were heavy snows in the interior of New York, Pennsylvania, and the District of Columbia the night of the 3d. Storm warnings were ordered displayed at ports on the Atlantic coast from Cape Hatteras northward at 1 p. m. of the 3d, and high winds followed over the region where warnings were displayed; the highest wind velocity reported was 56 miles an hour on the 4th at Block Island. No wrecking of vessels was reported as a result of this disturbance. In connection with the development of this storm off the coast, the following extract from a report by Prof. A. J. Henry, executive officer in charge of the Mount Weather Observatory, is of interest:

The abnormal direction of the wind observed in yesterday's (the 3d) kite flight was communicated to the forecast division in the following telegram: "The winds in the kite flight at Mount Weather, Va., Thursday, up to an altitude of about 2 miles were northerly. Above that elevation southerly winds prevailed, so that the upper kites flew in a direction exactly opposite to those lower down, a situation not hitherto developed at this station." A recent study of the synchronous pressure fluctuations at Pikes Peak and Colorado Springs, Colo., shows that the pressure often continues to fall at the upper station after it has begun to rise below; also, that the cold, northerly winds which follow in the rear of a "low" are generally shallow and that they do not always extend to the top of the mountains directly west of the Springs. The winds at Mount Weather on Wednesday at some distance aloft were from the southwest and strong; indeed, five kites and about 18,000 feet of wire were carried away. These winds were doubtless blowing in response to the strong barometric gradient afforded by the disturbance that was passing down the St. Lawrence Valley. Thursday morning a flight was started in northwest winds which extended upward at least 2 miles; above the stratum of lower air moving from the northwest was a deep stratum of rather light southerly winds which extended well into the cirrocumulus level, as indicated by the clouds. It may be, arguing from analogy with the Pikes Peak records, that the upper winds had not appreciably changed their direction since the day previous and that only the lower winds had changed direction. It is becoming apparent, from the kite observations at this station, that changes in the direction of the lower winds (from 1 to 2 miles above the surface) take place before they do aloft.

Following this disturbance the temperature fell considerably in the Southern and Eastern States and frosts occurred as far south as northern Florida.

The following weekly forecast was issued Sunday, November 6:

During the first half of the week the weather over the districts east of the Rocky Mountains will be generally fair, except that light rain or snow will fall Monday and Tuesday over the Great Lakes region and Monday night or Tuesday in northern New York and New England, attending a disturbance that will move along the northern border from the extreme Northwest. This disturbance will be followed by cooler weather in the Northwestern States, the upper Mississippi Valley, and the Lake region Monday and Tuesday. Another disturbance will appear on the Pacific coast Monday or Tuesday and move eastward, crossing the Middle West Wednesday or Thursday and the Atlantic States Friday or Saturday. This disturbance will be preceded by rising temperature and attended by unsettled weather, with rains on the Pacific coast and in the Southern States and rain or snow in northern districts; it will be followed by considerably colder weather.

A storm appeared in the Northwest on the 8th and moved eastward and reached the St. Lawrence Valley on the 11th, attended by general precipitation during its movement eastward, and high winds and snows in the Great Lakes region and later off the Middle Atlantic coast. Warnings of these conditions were issued well in advance of their occurrence.

The following is an editorial that appeared in the Cleveland News of November 18:

The recent long-continued gales were not characterized by notable loss of life on the Great Lakes. * * * This result is said to have been due to increased caution on the part of vessel managers, increased respect for storm warnings, and increased reluctance to take chances for profit. These conditions may being the 1910 navigation to an end unmarred by calamities like those of 1909.

The following forecast was issued Sunday, November 13:

A disturbance that is developing in the Southwest will move eastward, crossing the Mississippi and Ohio Valleys and the Lake region Monday night and Tuesday and the Eastern States Tuesday or Wednesday; this disturbance will be preceded by rising temperature and attended by unsettled weather with snow in Northern and local rains in Middle and Southern States from the Mississippi Valley to the Atlantic coast. It will be followed by considerably colder weather in the Southern and Southwestern States by Monday night and Tuesday. Another disturbance will appear on the north Pacific coast Monday or Tuesday; it will cause rains in the Pacific States, and during its passage eastward over the Northern States it will be preceded by rising temperature, attended by unsettled weather and rain or snow in the northern half of the country. This disturbance will reach the Atlantic States Friday, and it will be followed by a change to colder weather, the change to colder first appearing in the Northwest Thursday or Friday, whence it will move eastward and southward over much of the country east of the Rocky Mountains.

Following the disturbance that passed up the St. Lawrence Valley on the 11th, pressure remained abnormally low over the Canadian Maritime Provinces and westerly gales continued until the 17th off the North Atlantic coast and strong

west and northwest winds with snow prevailed over the Great Lakes and the interior of the Atlantic States until the 16th. From the 8th to the 18th temperatures ruled below normal over practically all parts of the country, except on the Pacific coast, where normal conditions obtained. Rains continued over the North Pacific States from the 7th to the 11th and again set in over these States on the 17th, following the appearance of an area of low barometric pressure in the Bering Sea area. This area of low barometric pressure moved to the Middle Rocky Mountain region on the 18th, and the area of rains and snows extended to the Upper Missouri Valley on that day. The pressure continued low for several days over the Gulf of Mexico, and on the morning of the 19th a well-defined disturbance appeared over the northeastern portion of the Gulf of Mexico, and there were general rains in the east Gulf and South Atlantic States. At 10 a.m. of the 19th, northeast storm warnings were ordered for the Atlantic coast from Jacksonville to Wilmington. On the 20th the center of this disturbance had moved to a position a considerable distance off the south Atlantic coast, and the brisk and high northeast winds on the Carolina and Georgia coasts had diminished and become northwesterly.

The following weekly forecast was issued Sunday, November 20:

Following a prolonged period of low temperatures throughout the region east of the Rocky Mountains, the general pressure distribution over the Northern Hemisphere is such as to indicate a general reaction to higher temperature over the greater part of the country during the next several days. A disturbance that is now over Alaska will move eastward and reach the Atlantic States during the latter part of the week. This disturbance will cause rains in the North Pacific States during the first part of the week, and during the latter part of the week it will cause unsettled weather and probably local rains or snows over the northern districts east of the Rocky Mountains.

The disturbance that developed over the western Plateau region on the 18th moved eastward attended by light rains and snows over the region west of the Rocky Mountains on the 18th and from the 19th to 22d over the northern districts east of the Rocky Mountains. On the 19th a marked fall in temperature set in over the Bering Sea area and southern Alaska and an offshoot from this depression appeared on the north Pacific coast on the night of the 20th attended by rains and strong winds, warnings of which were issued on the morning of the 20th. On the 21st the center of this disturbance was over Alberta and on the 22d over Manitoba; on these dates rain continued in the northern Rocky Mountain region and the North Pacific States and the temperature increased decidedly in advance of the storm center. The storm on the 23d was over Lake Superior and there were rains and snows the night of the 22d over the Upper Mississippi Valley and the Upper Lake region. Storm warnings were displayed the morning of the 23d on Lake Erie and at 2 p. m. on Lakes Huron and Ontario. This disturbance continued its eastward movement over the Great Lakes, attended by a considerable area of precipitation and preceded by a marked change to warmer weather. With a continuation of low pressure over Alaska and the north Pacific Ocean, rains continued in the Pacific States, the Northern Plateau region and the northern Rocky Mountain region, and storm signals were again displayed on the north Pacific coast on the 21st, and on the 22d were extended southward to the northern California coast. The center of disturbance on the 23d was over British Columbia, whence it moved eastward to the Upper Mississippi Valley on the 24th and to the New England coast on the 25th. This disturbance was attended by rains from the Upper Mississippi Valley eastward over the Lake region, the Ohio Valley, and the Middle Atlantic and New England States, and forecasts for high northwest winds were issued for the North Atlantic coast. On the 24th another disturbance moved inland over northern California and on the 25th its center was over the Northern Plateau region, and rains were general in the Pacific States and snow fell in the northern Rocky Mountain region. On the morning of the 24th storm warnings were displayed in connection with this storm on the northern California coast. On the morning of the 26th the disturbance was over the eastern slope of the Rocky Mountains and storm warnings of high easterly winds were issued for Lakes Michigan and Superior, and on the afternoon of the 26th they were extended to Lakes Huron and Erie. This disturbance moved directly eastward and on the morning of the 27th its center was over Illinois.

The following weekly forecast was issued Sunday, November 27:

The international weather charts prepared daily at the central office of the Weather Bureau indicate that during the coming week a series of storms of marked intensity will cross the United States and that temperature changes preceding and following these disturbances will be decided. A disturbance that now covers the Mississippi Valley will advance eastward and cause unsettled weather with rains in the middle and southern and rain and snow in northern districts east of the Mississippi Valley during the first part of the week. This disturbance will be followed by a marked change to colder weather as far south as Florida and the Gulf States by Monday night or Tuesday. Another disturbance that is off the North Pacific coast will advance eastward attended by general precipitation and reach the Atlantic States by Thursday. It will be preceded by rising temperature and in all probability will be followed by a widespread change to colder weather.

The storm that was central over Illinois on the morning of the 27th was over Lake Erie on the 28th, and on this date a secondary storm center developed over North Carolina and storm warnings were ordered for the Atlantic coast from Jacksonville to Boston. General precipitation attended this disturbance and strong winds prevailed in the region where storm warnings were displayed. From the 21st to 26th a general reaction to higher temperature set in over a great part of the country which was followed by much colder weather and on the 27th warnings of freezing temperature or below were ordered for the interior of the west Gulf States and on the 28th cold-wave warnings were ordered for southeastern Mississippi, southern Alabama, northern Florida, and South Carolina. On the morning of the 27th storm warnings were ordered for the north Pacific coast in connection with a disturbance off the Oregon coast at 8 a. m. of that date. From the 28th to the 30th a general cold wave prevailed in the region east of the Rocky Mountains and snow fell in the Lake region, the Ohio Valley, and the North Atlantic States. Frosts occurred in the Gulf States and northern Florida on the 29th and 30th.

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	12	38.7	−0.7	+14.7	+1.3
Middle Atlantic	15	40.4	−3.4	+10.4	+0.9
South Atlantic	10	51.1	−3.0	+ 4.2	+0.4
Florida Peninsula*	8	62.7	−3.7	− 5.9	−0.5
East Gulf	11	54.5	−1.1	− 1.1	−0.1
West Gulf	10	58.6	+2.8	+12.2	+1.1
Ohio Valley and Tennessee	13	41.2	−3.9	+ 1.3	+0.1
Lower Lakes	10	35.9	−3.0	+ 5.6	+0.5
Upper Lakes	12	32.1	−2.1	+20.1	+1.8
North Dakota*	9	24.3	−0.9	+26.4	+2.4
Upper Mississippi Valley	14	34.9	−2.8	+11.0	+1.0
Missouri Valley	11	38.8	+0.8	+20.8	+1.9
Northern slope	9	34.4	+2.4	+27.1	+2.5
Middle slope	6	45.9	+4.1	+25.1	+2.3
Southern slope*	7	52.7	+2.5	+18.4	+1.7
Southern Plateau*	11	50.4	+2.3	+18.3	+1.7
Middle Plateau*	10	41.9	+4.9	+19.4	+1.8
Northern Plateau*	9	39.0	+1.7	+12.7	+1.2
North Pacific	7	45.4	+0.3	− 1.3	−0.1
Middle Pacific	5	53.1	−0.3	− 2.7	−0.2
South Pacific	4	57.7	+0.6	+13.4	+1.2

* Regular Weather Bureau and selected cooperative stations.

Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
		Inches.		*Inches.*	*Inches.*
New England	12	3.30	92	− 0.3	− 6.0
Middle Atlantic	15	2.29	82	− 0.5	− 5.0
South Atlantic	11	1.02	34	− 2.0	− 7.3
Florida Peninsula*	8	1.96	91	− 0.2	− 5.3
East Gulf	11	2.37	68	− 1.1	− 6.6
West Gulf	10	1.00	32	− 2.1	− 7.5
Ohio Valley and Tennessee	13	1.55	44	− 2.0	− 1.0
Lower Lakes	10	2.79	93	− 0.2	− 1.5
Upper Lakes	12	1.96	83	− 0.4	− 5.9
North Dakota*	9	0.33	52	− 0.3	− 6.9
Upper Mississippi Valley	15	0.60	29	− 1.5	− 8.9
Missouri Valley	11	0.16	12	− 1.2	− 4.7
Northern slope	9	0.83	100	0.0	− 2.8
Middle slope	6	0.14	15	− 0.8	− 7.2
Southern slope*	7	0.20	13	− 1.3	−11.4
Southern Plateau*	10	1.04	162	+ 0.4	− 2.5
Middle Plateau*	11	0.79	89	− 0.1	− 3.4
Northern Plateau*	9	3.09	173	+ 1.3	− 1.1
North Pacific	7	9.51	130	+ 2.2	− 1.0
Middle Pacific	7	1.68	51	− 1.2	− 8.3
South Pacific	4	0.26	21	− 1.0	− 5.8

* Regular Weather Bureau and selected cooperative stations.

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	78	+ 2	Missouri Valley	66	− 5
Middle Atlantic	70	− 5	Northern slope	73	+ 6
South Atlantic	70	− 8	Middle slope	55	− 7
Florida Peninsula	80	0	Southern slope	60	− 2
East Gulf	72	− 4	Southern Plateau	59	+16
West Gulf	69	− 5	Middle Plateau	61	+ 3
Ohio Valley and Tennessee	70	− 3	Northern Plateau	72	− 2
Lower Lakes	77	0	North Pacific	87	+ 3
Upper Lakes	82	+ 2	Middle Pacific	80	+ 5
North Dakota	85	+ 6	South Pacific	73	+ 6
Upper Mississippi Valley	73	− 1			

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	7.1	+ 1.6	Missouri Valley	4.5	− 0.3
Middle Atlantic	6.3	+ 1.1	Northern slope	6.6	+ 1.8
South Atlantic	3.4	− 1.4	Middle slope	4.3	+ 0.2
Florida Peninsula	2.8	− 1.8	Southern slope	3.8	− 0.6
East Gulf	4.4	− 0.6	Southern Plateau	2.6	− 0.4
West Gulf	4.0	− 0.7	Middle Plateau	5.0	+ 1.0
Ohio Valley and Tennessee	5.8	+ 0.5	Northern Plateau	8.3	+ 3.3
Lower Lakes	8.6	+ 2.6	North Pacific	8.4	+ 2.1
Upper Lakes	8.5	+ 2.7	Middle Pacific	6.0	+ 1.6
North Dakota	6.7	+ 1.7	South Pacific	4.5	+ 0.7
Upper Mississippi Valley	5.7	+ 0.7			

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Block Island, R. I.	3	56	ne.	Nantucket, Mass.	4	54	ne.
Do.	4	56	ne.	North Head, Wash.	5	60	se.
Do.	16	50	nw.	Do.	6	62	se.
Do.	17	58	nw.	Do.	7	70	se.
Do.	26	50	nw.	Do.	9	72	se.
Canton, N. Y.	10	54	sw.	Do.	10	60	s.
Cape Henry, Va.	4	50	nw.	Do.	19	72	se.
Cheyenne, Wyo.	23	54	w.	Do.	20	78	se.
Cleveland, Ohio	11	55	w.	Do.	21	50	s.
Do.	12	55	w.	Do.	22	84	se.
Columbus, Ohio	10	56	w.	Pensacola, Fla.	28	58	s.
Mount Tamalpais, Cal.	11	65	nw.	Point Reyes Light, Cal.	11	52	nw.
Do.	12	56	nw.	Do.	12	52	nw.
Do.	13	64	nw.	Do.	18	51	nw.
Do.	18	51	nw.	Do.	24	54	s.
Do.	25	58	nw.	Do.	25	54	nw.
Mount Weather, Va.	3	52	nw.	Tatoosh Island, Wash.	2	57	sw.
Do.	4	58	nw.	Do.	5	62	se.
Do.	5	56	nw.	Do.	7	72	se.
Do.	8	53	nw.	Do.	9	67	ne.
Do.	10	60	w.	Do.	10	51	s.
Do.	11	60	w.	Do.	20	62	s.
Do.	12	58	w.	Do.	22	63	ne.
Do.	13	56	w.	Do.	26	53	ne.
Do.	16	74	nw.	Do.	29	52	ne.
Do.	17	66	nw.				
Do.	25	54	nw.				
Do.	29	60	w.				

RIVERS AND FLOODS, NOVEMBER, 1910.

By Prof. H. C. FRANKENFIELD, in charge of River and Flood Division.

November, 1910, was preeminently a month of low water except in the Missouri Valley and the North Pacific States, and in many portions of the country the stages were the lowest of record. The deficiency in water supply was most pronounced in the upper Mississippi and lower Arkansas rivers, the Red River of the North, the upper Red River of the South, and in the rivers of California. More detailed accounts of the low waters will be found in the reports of the various district editors.

There were no floods during the month except a moderate one in the Willamette River and its tributaries during the closing days. The rise was caused by persistent and substantial rains from November 17 to 30, inclusive, but, owing to the moderate stages reached, no damage was done so far as is known. At the end of the month the crest of the rise had not reached Portland, Oreg.

Running ice appeared in the Missouri River at Bismarck, N. Dak., on November 6, and the river closed on November 19. Ice was first observed at Sioux City, Iowa, on November 19, but none was seen very far below that city. The Milk River froze over at Havre, Mont., on November 18, and the James River at Huron, S. Dak., on November 28. The St. Croix River at Stillwater, Minn., and the Wisconsin River at Muscoda, Wis., closed on November 17 and 18, respectively. Floating ice was first observed in the Mississippi River at St. Paul, Minn., on November 28, and on November 30 the main channel was blocked at Robert street. No ice was observed south of Muscatine, Iowa, where it was first observed on the last day of the month.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

Special papers on general meteorology.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Librarian.

The following have been selected from among the titles of books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are represented by a ——.

Alberta (province). Department of agriculture.
Annual report. 1909. Edmonton. 1910. 251, iii p. 8°.

American climatological association.
Transactions. 1910. v. 26. Philadelphia. 1910. xxvi, 235 p. 8°.

Fortschritte der Physik.
Fünfundsechzigster Jahrgang. 1909. III. Kosmischer Physik. Braunschweig. 1910. lxx, 584 p. 8°.

Havana. Colegio de Belén. Observatorio.
Observations. 1909. Habana. 1910. v. p. f°.

Moscow. Institut agronomique. Observatoire météorologique.
Observations. 1908. Moskva. 1910. xxxv, 72 p. 4°.

Métin, Albert.
La Colombe Britannique. Paris. 1908. 431 p. 8°. [Chapitre VI. Vents, pluies et saisons. p. 81–96.]

Öfversigt af Finska Vetenskaps-societetens Förhandlingar.
52. 1909–1910. *A.* Matematik och Naturvetenskaper. Helsingsfors. 1910. v. p. 8°.
C. Redogörelser och Förhandlingar. Helsingfors. 1910. v. p. 8°.

Saxony. Königl. sächs. Landes-Wetterwarte.
Dekaden-Monatberichte. (Vorläufige Mitteilung.) 1909. Jhrg. 12. Dresden. 1910. 106 p. f°.
Deutsches meteorologisches Jahrbuch, 1906. Jhrg. 24. Dresden. 1910. 187 p. f°.
Deutsches meteorologisches Jahrbuch, 1907. Jhrg. 25. I. Beobachtungen an den Stationen II. Ordnung. Dresden. 1910. 80 p. f°.

Tetens, Otto, & Linke, Franz.
Das Klima von Samoa. Berlin. 1910. 114 p. 4°. (Abhdl. k. Gesell. Wiss., Göttingen. Math.-Physik. Kl., Neue Folge, Bd. 7. No. 4.)

Zi-ka-wei. Observatoire magnétique, météorologique et sismologique.
Bulletin des observations. T. 32. Année 1906. Fasc. B.—Météorologie. Chang-Haï. 1909. xxiv, 149 p. f°.

RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

C. FITZHUGH TALMAN, Librarian.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a ——.

American climatological association. Transactions. Philadelphia. v. 26. 1910.
Hinsdale, Guy. The meteorologic and hygienic relations of the floods in France in 1910. p. 32–54.
Phillips, W. F. R. Natural and artificial or house climates. p. 55–61.

Journal of geography. Madison. v. 9. December, 1910.
Chamberlain, James F. Climate as related to industry and commerce. p. 93–98.

Nature. London. v. 85. December, 1910.
Barnes, H. T. Marine microthermograms and the influence of icebergs on the temperature of the sea. p. 137–138. (Dec. 1.)
Shaw, W. N. The new meteorological office. p. 181–183. (Dec. 8.)

Royal meteorological society. Quarterly journal. London. v. 36. October, 1910.
Nash, William Carpenter. Daily rainfall at the royal observatory, Greenwich, 1841–1903. p. 309–328.
Bonacina, L. C. W. Low temperature periods during the winters 1908–9 and 1909–10. p. 329–332.
Corless, Richard. The rate of rainfall at Kew in 1908. p. 333–340.
Craig, J. I. England—Abyssinia—the South Atlantic; a meteorological triangle. p. 341–360.
Mossman, R. C. The present position of antarctic meteorology. p. 361–374.

Scientific American. New York. v. 103. Dec. 24, 1910.
——The specter of the Brocken. p. 494.
——The invention of the raingage. p. 504.

United States. Weather bureau. Meteorological chart of the North Atlantic ocean. February, 1911.
Pickels, A. C. Waterspouts. [Also published in the N. Pacific chart for February, 1911.]

Annales de chimie et de physique. Paris. Tome 21. Décembre 1910.
Schwoerer, Émile. Les phénomènes thermiques de l'atmosphère. p. 433–457.

Nature. Paris. 39 année. 1910.
Descombes, Paul. Pluies normales, pluies diluviennes et inondations. p. 27–28. (10 Déc.)
Loisel, J. Le spectre du Brocken. p. 33–35. [Includes photograph of Brocken specter seen from Pic du Midi.]

9. Congrès international d'aéronautique. Procès-verbaux. Nancy, 1909.
Teisserenc de Bort, L. La circulation de l'atmosphère, d'après les observations des nuages et les sondages aériens. p. 329–338.
Brunhes, B[ernard]. L'enseignement de la météorologie dans les universités françaises. p. 339–342.

Beiträge zur Geophysik. Leipzig. 10. Band. 4. Heft. 1910.
Mainka, C. Seismometrische Beobachtungen in Strassburg i. E. in der Zeit vom 1. Januar bis 31. Dezember 1905. p. 387–467.
Benndorf, H. Beiträge zur rationellen Seismometrie. II. Kl. Mitt. p. 219–233.
Tams, E. Das Epizentrum der Seismometrie. Kl. Mitt. p. 250–255.
Geographische Zeitschrift. Leipzig. 16. Jahrgang. 1910.
Hettner, A. Die klimatischen Regionen der Wasserführung. p. 645–648.
Meteorologische Zeitschrift. Braunschweig. Band 27. November 1910.
Heuer, W. Über die Ursachen des Malojawindes. p. 481–488.
Köppen, W. Die Verschiebungen der Atmosphäre im Jahreslaufe und die Höhe des antarktischen Kontinents. p. 488–492.
Hann, J[ulius] v. Zur Theorie der aufsteigenden Talwinde. p. 494–499.
Quervain, A. de. Der Temperaturunterschied zwischen dem Säntisgipfel und den aerologischen Messungen der Drachenstation am Bodensee. p. 499–501.
Hann, J[ulius] v. Die Temperatur des Säntisgipfels. p. 501–502.
——Klima von Chemulpo (Korea). p. 502–503.
Hann, J[ulius]. Klima von Arequipa (Peru). p. 504–507.
Trabert, W. Die Abhängigkeit der Richtung einer Depression von der Temperaturverteilung. p. 508–509.
Hann, J[ulius] v. Temperatur und Regenfall zu Hebron in Palästina 1896 bis 1908. p. 509–510.
——Zum Klima im Sandschak. p. 510–511.
Hann, J[ulius] v. Ergebnisse langjährige Regenmessungen zu Colon am Panamakanal. p. 511.
——Klima von Üsküb, Turkei. p. 512.
——Zum Klima von Kleinasien. p. 513.
Siegl, Ferd. Resultate der meteorologischen Beobachtungen im Jahre 1907 und 1908 am Observatorium erster Ordnung zu Curityba (Staat Paraná). p. 513–515.
Hann, J[ulius] v. Resultate der meteorologischen Beobachtungen zu Salonik. p. 515–516.
Friesenhof, Gregor v. Die Wetterperioden und ihre Ursachen. p. 517–519.
Hann, J[ulius] v. Meteorologische Beobachtungen an der deutschen Station auf Teneriffa. p. 520–522.
——Meteorologische Beobachtungen in Kamerun. p. 522.
Physikalische Zeitschrift. Leipzig. 11. Jahrgang. Dez. 8, 1910.
Kähler, K. Notiz über die elektrische Leitfähigkeit der Atmosphäre auf der Schneekoppe. p. 1185–1186.
Prometheus. Berlin. Jahrgang 22. 3. Dezember 1910.
Quittner, Victor. Die Gesetze des Luftwiderstandes und ihre Anwendung in der Luftschiffahrt. p. 145–150.
Översigt af Finska Vetenskaps-Societetens Förhandlingar. v. 52. Afd. A. no. 11. 1909–1910.
Ramsay, Wilhelm. Orogenesis und Klima. p. 1–48.

CONDENSED CLIMATOLOGICAL SUMMARY.

In the following table are given, for the various sections of the Climatological Service of the Weather Bureau, the average temperature and rainfall, the stations reporting the highest and lowest temperatures with dates of occurrence, the stations reporting the greatest and least monthly precipitation, and other data, as indicated by the several headings.

The mean temperatures for each section, the highest and lowest temperatures, the average precipitation, and the greatest and least monthly amounts are found by using all trustworthy records available.

The mean departures from normal temperature and precipitation are based only on records from stations that have ten or more years of observations. Of course the number of such records is smaller than the total number of stations.

Temperature and precipitation by sections, November, 1910.

Section.	Temperature—in degrees Fahrenheit.							Precipitation—in inches and hundredths.					
	Section average.	Departure from the normal.	Monthly extremes.					Section average.	Departure from the normal.	Greatest monthly.		Least monthly.	
			Station.	Highest.	Date.	Station.	Lowest.	Date.			Station.	Amount.	Station.	Amount.
Alabama	51.7	− 2.7	Highland Home	86	10	2 stations	21	4	2.09	− 0.93	Thomasville	4.92	Cedar Bluff	0.44
Arizona	54.4	+ 1.3	Columbia	99	8	2 stations	16	20†	1.70	+ 0.76	Parker	4.49	Mohawk Summit	0.15
Arkansas	51.5	+ 0.5	Lewisville	85	24	2 stations	17	28†	0.47	− 3.30	Marked Tree	1.45	2 stations	T.
California	52.8	+ 0.3	Mammoth Tank	103	1†	Alturas	− 1	26	1.91	− 1.26	Weitchpec	18.74	2 stations	0.00
Colorado	39.2	+ 4.8	Hoehne	88	3†	Hermit	− 7	27	0.78	− 0.11	Corona	3.84	7 stations	T.
Florida	61.1	− 3.7	Orange City	89	15	Molino	27	30	1.97	− 0.16	Tallahassee	4.75	Avon Park	0.31
Georgia	52.0	− 2.4	Valdosta	87	2	3 stations	22	4†	1.84	− 0.85	Thomasville	5.27	Hartwell	0.12
Hawaii (October)	72.2	.....	Kihei, Maui	90	19	Humuula, Hawaii	36	21	4.92	.....	Hakalau, Hawaii	16.71	2 stations	0.00
Idaho	38.2	+ 1.8	Garnet	76	2†	Salmon	−12	27	3.49	+ 0.76	Wallace	12.05	Mackay	0.58
Illinois	37.4	− 3.7	Golconda	81	27	2 stations	10	12†	1.15	− 1.49	Windsor	4.65	Coatsburg	0.05
Indiana	37.3	− 4.4	Rome	73	9	Judyville	9	19	1.88	− 1.28	Terre Haute	3.24	Mount Vernon	0.66
Iowa	33.4	− 2.5	Council Bluffs	76	8	Jefferson	5	3	0.34	− 1.05	Cumberland	1.03	7 stations	T.
Kansas	44.4	+ 1.6	Cunningham	87	7†	Densmore	6	28	0.08	− 1.07	Smith Center	0.31	5 stations	0.00
Kentucky	41.1	− 4.7	Marion	78	24	Loretto	11	19	2.04	− 1.78	Eubank	4.29	Franklin	1.03
Louisiana	59.5	+ 0.7	Ruston	98	25	2 stations	24	29	2.89	− 1.00	Donaldsonville	5.90	Cameron	0.35
Maryland and Delaware	40.7	− 4.1	Easton, Md	76	10	2 stations, Md	2	20†	2.04	− 0.66	Annapolis, Md	4.72	Great Falls, Md	0.67
Michigan	33.2	− 2.2	Thornville	72	1	Mount Pleasant	7	29	2.13	− 0.42	Woodlawn	4.64	Iron River	0.70
Minnesota	25.3	− 3.7	2 stations	59	4†	Roseau	−19	29	0.52	− 0.69	International Falls	1.45	Pipestone	T.
Mississippi	53.8	− 1.3	Natchez	85	14†	6 stations	26	4†	2.02	− 1.28	Laurel	5.57	Swan Lake	0.20
Missouri	42.0	− 2.3	Belle	83	1	2 stations	11	3†	0.38	− 2.13	Louisiana	1.07	Sublett	T.
Montana	33.0	+ 1.3	3 stations	70	3	Bowen	−29	27	1.70	+ 0.59	Snowshoe	12.17	Jordan	0.00
Nebraska	37.8	+ 1.0	Cambridge	81	8	3 stations	0	18†	0.14	− 0.57	Fullerton	0.44	8 stations	0.00
Nevada	42.2	+ 2.8	Logan	86	2	Tecoma	− 8	28	0.46	− 0.25	Lewer's Ranch	1.58	McAfee's Ranch	0.00
New England	36.7	− 1.2	3 stations	64	2	Jacksonville, Vt	4	27	3.40	− 0.67	Canton, Conn	6.02	2 stations	1.42
New Jersey	40.4	− 2.7	Indian Mills	71	10	Indian Mills	12	30	3.79	+ 0.29	Long Branch	5.73	Cape May	1.63
New Mexico	45.8	+ 2.8	Carlsbad	88	24	Red River Canyon	4	17	0.32	− 0.31	Alma	2.01	2 stations	0.00
New York	34.4	− 2.4	Bedford	69	3	Nehasane	− 1	21	3.12	+ 0.35	Cutchogue	6.33	Blue Ridge	0.97
North Carolina	45.4	− 4.2	2 stations	77	2	Banners Elk	13	20	0.77	− 2.16	Chapel Hill	2.48	Highlands	0.00
North Dakota	23.9	− 2.6	2 stations	68	2†	Cando	−23	29	0.37	− 0.14	McKinney	1.50	6 stations	0.00
Ohio	36.3	− 4.4	Waverly	78	1	Garrettsville	11	20	1.89	− 0.81	Hillhouse	4.60	Nellie	0.53
Oklahoma	51.4	+ 1.3	Okmulgee	89	27	Hurley	10	30	0.12	− 1.90	Ada	1.00	15 stations	0.00
Oregon	42.3	− 0.7	Dayville	76	2	Yonna	−10	25	8.27	+ 2.83	Glenora	37.02	Buena Vista	0.43
Pennsylvania	36.8	− 3.6	Johnstown	68	1	2 stations	9	20†	2.45	− 0.30	Scranton	5.63	Altoona	0.33
Porto Rico	76.6	− 0.1	2 stations	96	1†	Jayuya	49	24	3.91	− 3.63	Maricao	12.25	Santa Isabel	0.88
South Carolina	51.1	− 3.0	Florence	85	9	3 stations	24	13	1.04	− 1.36	Walterboro	2.63	Chappells	0.00
South Dakota	31.4	− 1.0	Oelrichs	73	25	3 stations	0	30	0.36	− 0.42	Englewood	2.00	7 stations	T.
Tennessee	44.7	− 3.3	Carthage	80	27	Erasmus	12	13	1.41	− 2.45	Livingston	3.46	Dover	T.
Texas	59.5	+ 2.6	Tilden	96	25	Texline	10	28†	0.73	− 1.64	Nacogdoches	3.41	14 stations	0.00
Utah	42.0	+ 4.1	Castle Dale	83	14	Woodruff	− 3	27	0.78	− 0.07	Ranch	2.01	Garrison	T.
Virginia	40.3	− 5.2	Lincoln	76	11	Burks Garden	7	20	1.47	− 1.21	Lebanon	3.47	Buchanan	0.41
Washington	40.7	+ 1.8	Omak	77	7	Waterville	3	26	6.62	+ 1.29	Goat Lake	23.74	Sunnyside	1.22
West Virginia	37.3	− 5.6	2 stations	75	9	Bayard	5	20	1.95	− 0.78	Pickens	4.41	Union	0.66
Wisconsin	28.5	− 4.6	Racine	65	9	2 stations	− 1	6	1.41	− 0.29	Kewaunee	3.85	2 stations	0.30
Wyoming	33.6	+ 3.4	Wyncote	73	25	Norris, Y. N. P.	−25	27	0.90	− 0.13	Snake River, Y. N. P.	4.60	2 stations	0.00

† Other dates also.

TABLE 1.—*Climatological data for U. S. Weather Bureau stations, November, 1910.*

Stations.	Pressure in inches.			Temperature of the air, in degrees Fahrenheit.										Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.			Wind.				Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.					Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.					
New England.				**38.7**	**− 0.7**											**78**	**3.30**	**− 0.3**								**7.1**		
Eastport	29.63	29.71	−0.30	37.4	+ 0.6	51	11	42	23	21	33	20	35	32	82	2.14	− 1.9	13	9,745	w.	46	ne.	29	2	7	21	8.4	10.3	....
Greenville	28.56	29.75	.....	31.4	.....	52	1	36	15	21	27	29	.....	.....	.....	.....	3.21	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.8	....
Portland, Me.	29.62	29.75	−0.29	37.4	− 0.2	54	1	42	23	21	32	23	34	29	74	1.85	− 2.0	9	6,949	w.	36	n.	26	9	8	13	6.2	0.6	....
Concord	29.45	29.77	−0.29	36.5	− 0.3	56	2	43	15	21	30	31	.....	.....	.....	.....	2.60	− 0.8	8	4,299	nw.	24	n.w.	27	4	11	15	6.9	4.8	3.0
Burlington	29.36	29.82	−0.23	33.5	− 0.2	55	2	38	14	21	29	22	.....	.....	.....	.....	2.43	− 0.2	16	7,667	nw.	47	s.	2	0	6	24	8.7	16.5	6.5
Northfield	28.83	29.80	−0.25	32.0	0.0	53	1	37	11	21	27	31	30	27	86	2.19	− 0.4	12	4,834	n.	31	s.	2	2	7	21	8.4	13.3	7.5
Boston	29.62	29.76	−0.29	41.2	0.0	61	2	47	26	20	36	20	37	33	74	3.75	− 0.4	8	8,013	w.	34	e.	4	3	12	15	7.1	1.4	....
Nantucket	29.73	29.74	−0.31	43.0	− 2.2	59	10	47	30	20	39	17	40	38	85	3.46	+ 0.2	14	11,611	w.	54	ne.	4	3	15	12	6.5	.....	....
Block Island	29.73	29.76	−0.30	43.0	− 2.3	60	10	47	27	20	39	17	39	34	73	5.58	+ 1.7	13	15,867	nw.	58	nw.	17	8	11	11	6.4	T.	....
Narragansett	.....	.....	.....	40.3	− 2.0	60	10	48	19	20	33	26	.....	.....	.....	.....	4.45	.....	8	.....	w.	.....	.....	.....	21	3	6	.....	T.	....
Providence	29.60	29.77	−0.30	39.8	− 0.6	58	10	46	21	20	34	26	36	32	77	3.37	− 0.5	10	8,331	nw.	36	n.	27	6	11	13	6.6	0.8	....
Hartford	29.62	29.80	−0.28	39.2	− 0.3	60	2	45	22	21	33	28	35	31	76	4.36	+ 0.5	11	5,363	nw.	31	nw.	16	2	12	16	7.2	3.3	T.
New Haven	29.67	29.79	−0.28	40.7	− 0.6	62	10	47	23	20	34	25	35	30	71	4.56	+ 1.0	10	7,101	w.	41	n.	4	10	12	8	5.4	4.1	....
Middle Atlantic States.				**40.4**	**− 3.4**											**70**	**2.29**	**− 0.5**								**6.3**		
Albany	29.71	29.82	−0.26	37.4	− 1.0	60	2	43	19	21	32	30	34	31	79	2.74	− 0.1	14	5,554	nw.	30	n.	4	3	6	21	7.7	4.3	0.5
Binghamton	28.89	29.84	−0.29	34.2	− 3.4	57	1	39	19	21	30	30	.....	.....	.....	.....	4.02	+ 1.8	20	4,871	w.	30	w.	10	0	6	24	9.1	32.9	2.3
New York	29.47	29.81	−0.28	41.6	− 2.4	65	2	47	29	20	36	17	37	31	69	4.62	+ 1.2	8	10,506	w.	46	nw.	16	2	14	14	6.9	T.	....
Harrisburg	29.49	29.90	−0.21	39.2	− 2.5	61	1	44	25	21	34	25	34	28	66	0.83	− 1.5	10	6,286	w.	35	w.	10	2	13	15	7.4	3.0	T.
Philadelphia	29.74	29.86	−0.24	43.2	− 1.7	66	10	49	30	21	38	21	38	32	67	3.65	+ 0.6	10	8,114	nw.	40	n.	3	3	15	12	6.4	.....	....
Scranton	28.98	29.85	−0.24	36.7	− 2.4	64	10	42	23	21	32	26	34	31	82	5.63	+ 3.3	13	5,138	sw.	23	sw.	11	2	5	23	8.3	16.7	T.
Atlantic City	29.80	29.86	−0.24	42.4	− 3.1	64	2	49	26	20	35	21	37	32	71	2.32	− 0.9	7	6,366	nw.	26	n.	4	6	15	9	5.6	T.	....
Cape May	29.86	29.88	−0.22	43.6	− 3.8	65	2	49	27	20	38	21	38	34	73	1.63	− 1.6	9	8,296	nw.	30	nw.	3	10	16	4	5.3	T.	....
Baltimore	29.77	29.90	−0.21	42.6	− 3.2	64	10	49	28	21	36	24	37	30	66	1.93	− 1.0	8	6,031	nw.	35	nw.	4	7	14	9	5.9	1.0	....
Washington	29.78	29.91	−0.21	41.4	− 3.6	66	10	48	23	21	34	29	35	28	64	2.28	− 0.4	10	6,469	nw.	35	nw.	8	9	10	11	5.3	4.0	....
Cape Henry	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
Lynchburg	29.20	29.96	−0.17	42.4	− 3.7	64	1	52	23	21	33	35	35	23	63	0.87	− 1.9	5	3,761	nw.	31	nw.	25	8	11	11	5.6	T.	....
Mount Weather	28.02	29.89	−0.23	36.0	− 3.6	62	10	42	22	20	30	23	32	27	74	0.93	− 1.9	7	18,143	nw.	74	nw.	16	4	13	13	6.4	2.1	T.
Norfolk	29.83	29.93	−0.18	45.4	− 5.8	71	10	53	30	30	38	24	40	35	70	1.02	− 1.7	8	6,809	nw.	40	nw.	4	16	6	8	4.4	.....	....
Richmond	29.79	29.95	−0.17	42.4	− 6.4	70	10	52	24	21	33	31	.....	.....	.....	.....	0.98	− 1.4	6	5,822	nw.	36	nw.	4	8	11	11	5.5	.....	....
Wytheville	27.55	29.98	−0.15	37.8	− 4.8	66	9	47	18	20	29	38	32	27	70	0.93	− 2.1	7	5,656	w.	40	nw.	14	14	5	11	5.0	T.	T.
South Atlantic States.				**51.1**	**− 3.0**											**70**	**1.02**	**− 2.0**								**3.4**		
Asheville	27.62	30.03	−0.11	41.4	− 3.7	68	14	52	20	30	30	36	35	30	73	0.35	− 3.0	8	7,160	nw.	31	nw.	28	17	8	5	3.5	T.	....
Charlotte	29.14	29.99	−0.14	48.0	− 2.4	74	14	58	28	13	38	33	39	30	57	0.36	− 2.5	4	4,553	nw.	30	sw.	14	16	10	4	3.4	.....	....
Hatteras	29.91	29.92	−0.19	51.3	− 5.4	71	10	58	38	30	45	24	47	44	82	0.38	− 4.3	4	11,270	nw.	42	nw.	4	18	6	6	3.9	.....	....
Manteo	.....	.....	.....	48.2	.....	71	10	58	30	17	38	.....	.....	.....	.....	0.54	− 4.1	3	.....	nw.	.....	.....	.....	23	2	5	.....	.....	....
Raleigh	29.55	29.97	−0.16	46.2	− 4.0	72	10	56	29	21	36	30	38	29	58	0.69	− 1.7	4	5,648	nw.	27	n.	25	20	5	5	3.2	.....	....
Wilmington	29.88	29.97	−0.15	50.5	− 3.6	73	2	61	32	13	40	32	44	39	73	0.92	− 1.5	5	5,103	nw.	25	nw.	4	17	8	5	3.4	.....	....
Charleston	29.93	29.98	−0.14	54.6	− 3.5	76	25	63	37	30	46	26	48	44	74	1.61	− 1.3	6	6,993	w.	36	w.	28	18	9	3	3.4	.....	....
Columbia, S. C.	29.60	29.99	−0.13	51.6	− 2.2	77	14	63	30	13	40	33	43	35	60	0.59	− 1.6	6	4,696	w.	34	sw.	14	18	8	4	3.2	.....	....
Augusta	29.81	30.00	−0.13	52.0	− 1.9	76	14	64	31	13	40	33	44	40	72	1.35	− 1.6	7	4,448	w.	28	w.	28	15	10	5	3.5	.....	....
Savannah	29.94	30.01	−0.11	55.6	− 1.9	76	25	65	36	13	46	27	49	46	76	2.74	+ 0.4	8	9,092	w.	38	nw.	30	21	4	5	3.1	.....	....
Jacksonville	29.97	30.02	−0.08	59.5	− 1.8	79	25	69	40	4	50	26	53	49	77	1.64	− 0.6	4	5,705	nw.	39	sw.	28	19	6	5	3.6	.....	....
Florida Peninsula.				**66.9**	**− 3.6**											**80**	**1.53**	**− 0.3**								**2.8**		
Jupiter	29.96	29.99	−0.06	66.8	− 4.8	81	10	76	44	30	58	25	60	58	79	1.31	− 1.7	7	6,163	nw.	33	ne.	1	16	12	2	3.2	.....	....
Key West	29.99	30.01	−0.01	70.4	− 3.9	79	17	75	58	6	66	17	65	62	77	1.35	− 1.1	3	6,045	ne.	31	sw.	19	24	4	2	2.0	.....	....
Tampa	29.99	30.03	−0.05	63.4	− 2.0	79	2	72	46	30	55	27	57	55	83	1.94	+ 0.2	3	4,641	nw.	26	sw.	28	18	7	5	3.1	.....	....
East Gulf States.				**54.5**	**− 1.1**											**72**	**2.37**	**− 1.1**								**4.4**		
Atlanta	28.78	30.04	−0.09	49.6	− 2.3	73	24	58	27	4	41	28	42	34	62	0.57	− 2.8	5	10,219	w.	38	nw.	30	15	2	13	4.7	.....	....
Macon	29.64	30.04	−0.09	51.6	− 1.7	76	14	63	32	4	40	35	.....	.....	.....	.....	1.64	− 1.5	7	4,691	nw.	27	sw.	27	17	7	6	3.6	.....	....
Thomasville	29.74	30.05	−0.07	56.0	− 2.5	79	14	69	34	7	43	40	48	46	82	5.27	+ 2.6	6	3,364	nw.	25	sw.	28	16	7	7	3.9	.....	....
Pensacola	30.01	30.07	−0.04	59.3	− 0.3	76	25	67	37	7	52	26	.....	.....	.....	.....	2.15	− 1.6	7	8,533	n.	58	s.	28	14	11	5	4.1	.....	....
Anniston	29.28	30.09	−0.03	48.8	− 3.1	76	24	60	26	4	37	36	.....	.....	.....	.....	1.34	− 2.1	5	3,921	n.	23	sw.	27	14	4	12	5.0	T.	....
Birmingham	29.31	30.09	−0.03	51.0	− 3.1	72	24	61	28	4	41	32	43	38	68	1.46	− 1.9	6	4,476	nw.	25	s.	2	27	12	9	4.9	.....	....
Mobile	30.01	30.07	−0.04	58.8	+ 1.3	78	25	67	39	30	50	27	52	47	74	2.08	− 1.7	6	5,386	n.	26	s.	2	27	17	9	4	3.4	.....	....
Montgomery	29.82	30.08	−0.04	53.9	− 1.8	78	25	64	34	4	43	32	47	41	69	2.75	− 0.4	6	4,113	nw.	26	nw.	27	15	7	8	3.9	.....	....
Meridian	29.67	30.08	−0.04	52.6	− 0.6	77	27	63	31	4	42	35	46	42	77	2.81	− 1.3	8	3,524	sw.	22	sw.	27	12	4	14	5.4	.....	....
Vicksburg	29.80	30.09	−0.03	56.2	+ 0.3	77	13	65	35	30	47	29	49	43	70	2.97	− 1.2	8	4,694	s.	28	nw.	27	13	8	9	4.7	.....	....
New Orleans	30.02	30.07	−0.03	61.8	+ 1.2	82	10	70	44	29	54	25	55	50	74	3.05	− 0.7	8	5,575	n.	24	nw.	28	14	5	11	4.9	.....	....
West Gulf States.				**58.6**	**+ 2.8**											**69**	**1.00**	**− 2.1**								**4.0**		
Shreveport	29.80	30.07	−0.04	57.8	+ 2.5	82	24	68	35	29	47	34	50	44	68	2.94	− 1.1	6	4,059	s.	28	nw.	27	15	7	8	4.4	.....	....
Bentonville	28.66	30.05	−0.06	47.8	+ 1.1	78	13	61	22	28	35	36	.....	.....	.....	.....	0.19	− 2.8	2	4,352	s.	24	s.	26	22	6	2	2.8	.....	....
Fort Smith	29.56	30.05	−0.06	52.0	+ 2.1	82	13	64	29	29	40	37	43	34	58	0.45	− 2.8	3	5,398	e.	34	w.	27	18	6	6	3.4	.....	....
Little Rock	29.70	30.08	−0.04	52.6	+ 1.1	76	23	62	33	30	43	34	45	39	66	0.09	− 4.5	3	6,331	sw.	39	nw.	27	12	12	6	4.5	.....	....
Brownsville	.....	.....	.....	69.5	.....	87	10	79	42	29	60	36	.....	.....	.....	.....	0.20	.....	3	.....	e.	.....	.....	.....	.....	.....	.....	.....	.....	....
Corpus Christi	30.02	30.04	−0.03	67.8	+ 4.4	85	24	75	48	28	61	29	62	59	81	0.29	− 2.1	4	7,542	se.	31	ne.	5	10	13	7	4.8	.....	....
Fort Worth	29.32	30.04	−0.06	58.6	+ 3.5	87	24	70	32	28	47	40	48	40	57	0.14	− 1.4	3	7,360	s.	38	nw.	27	17	9	4	3.7	.....	....
Galveston	30.01	30.07	−0.02	65.6	+ 2.7	78	27	70	46	28	61	26	61	59	82	0.95	− 3.1	5	7,451	se.	43	nw.	27	21	5	4	3.2	.....	....
Houston	29.91	30.06	.....	64.8	.....	87	10	75	40	29	55	32	.....	.....	.....	.....	0.88	.....	4	5,647	se.	27	nw.	27	10	14	6	4.8	.....	....
Palestine	29.52	30.06	−0.05	60.0	+ 3.1	84	24	70	34	29	50	32	52	46	67	1.92	− 1.7	6	5,961	ne.	33	nw.	27	11	12	7	4.8	.....	....
San Antonio	29.31	30.04	−0.04	63.4	+ 4.2	83	4	74	39	29	53	30	56	51	73	1.38	− 0.4	3	4,239	s.	26	n.	27	11	12	7	5.0	.....	....
Taylor	29.44	30.05	−0.03	60.8	+ 3.1	84	24	71	37	29	50	31	.....	.....	.....	.....	1.63	− 1.0	6	5,779	n.	30	w.	27	20	5	5	3.1	.....	....
Ohio Valley and Tenn.				**41.2**	**− 3.9**											**70**	**1.55**	**− 2.0**								**5.8**		
Chattanooga	29.25	30.08	−0.06	47.2	− 3.1	70	9	57	27	30	37	31	39	32	62	1.54	− 2.0	6	5,626	nw.	35	nw.	30	14	8	8	4.5	.....	....
Knoxville	28.98	30.05	−0.08	43.6	− 3.5	68	9	54	26	20	33	34	38	33	74	0.97	− 2.6	7	3,256	w.	32	s.	27	13	8	9	4.4	T.	....
Memphis	29.67	30.10	−0.02	50.3	− 1.1	74	27	59	29	30	42	29	43	36	62	1.04	− 3.6	4	6,211	sw.	35	nw.	27	16	5	9	4.0	.....	....
Nashville	29.48	30.08	−0.04	45.9	− 2.8	70	27	57	26	30	35	32	39	32	64	1.17	− 2.7	9	6,255	w.	38	nw.	28	15	6	9	4.4	T.	....
Lexington	28.95	30.04	−0.08	39.6	− 5.1	68	9	48	22	12	31	27	.....	.....	.....	.....	1.72	− 1.8	7	7,434	w.	36	w.	24	11	8	11	5.6	T.	T.
Louisville	29.46	30.06	−0.06	42.1	− 4.2	70	9	51	25	30	34	30	36	29	65	3.32	− 0.9	7	5,848	w.	34	nw.	14	14	9	7	4.5	T.	T.
Evansville	29.58	30.06	−0.06	42.3	− 3.0	68	27	51	24	30	34	28	37	32	72	1.13	− 3.0	5	5,050	nw.	31	s.	9	13	13	4	3.9	.....	....
Indianapolis	29.12	30.03	−0.07	37.5	− 4.1	68	9	46	20	30	30	27	33	28	73	1.90	− 1.6	8	6,609	nw.	36	sw.	9	8	10	12	5.9	0.1	0.1
Cincinnati	29.34	30.03	−0.09	40.2	− 4.4	70	9	48	23	30	32	35	34	28	65	1.35	− 1.9	6	5,487	w.	30	sw.	10	8	8	14	6.5	0.1	0.1
Columbus	29.09	29.99	−0.12	37.0	− 4.4	66	9	43	23	30	31	30	33	28	72	0.79	− 2.3	7	9,414	w.	56	w.	10	5	5	20	7.2	0.6	0.6
Pittsburg	29.03	29.95	−0.15	37.1	− 5.8	63	9	42	24	30	32	29	33	29	74	1.32	− 1.2	17	10,234	w.	42	nw.	10	1	6	23	8.5	1.6	T.
Parkersburg	29.33	30.00	−0.12	38.7	− 4.5	69	9	46	21	20	31	39	34	30	76	1.64	− 1.2	9	4,610	w.	32	w.	10	2	5	23	8.6	0.3	0.2
Elkins	27.88	30.00	−0.12	34.6	− 5.0	67	9	43	15	23	26	45	30	27	81	2.26	− 0.6	15	3,382	w.	25	w.	10	4	4	22	8.0	4.3	2.5
Lower Lake Region.				**35.9**	**− 3.0**											**77**	**2.79**	**− 0.2**								**8.6**		
Buffalo	29.02	29.86	−0.19	36.1	− 3.2	61	1	40	25	21	32	21	34	31	83	2.89	− 0.5	18	11,725	w.	46	w.	10	0	7	23	8.6	3.6	0.4
Canton	29.34	29.83	.....	32.0	− 1.9	59	1	37	14	21	27	21	.....	.....	.....	.....	2.91	− 0.5	19	6,890	sw.	54	sw.	10	1	7	22	8.3	15.0	3.4
Oswego	29.45	29.83	−0.22	36.2	− 2.9	61	1	41	20	21	32	24	34	30	79	4.50	+ 1.1	21	9,641	nw.	40	sw.	10	0	3	27	9.1	12.7	T.
Rochester	29.28	29.86	−0.19	35.8	− 2.1	64	1	40	26	21	32	27	33	29	78	3.07	+ 0.3	19	7,128	w.	39	w.	10	0	2	28	9.5	15.7	3.5
Syracuse	29.19	29.84	−0.22	34.6	− 4.1	59	1	39	19	21	30	20	.....	.....	.....	.....	2.18	− 0.5	23	8,969	w.	45	sw.	10	0	6	24	8.6	15.3	1.2
Erie	29.11	29.89	−0.17	37.4	− 3.7	60	1	42	28	18	33	24	34	30	75	3.45	− 0.2	20	10,061	w.	41	nw.	12	0	4	26	9.0	14.4	0.7
Cleveland	29.09	29.93	−0.14	37.1	− 2.7	63	9	42	25	20	33	28	33	29	73	3.08	+ 0.3	19	13,594	w.	55	w.	12	1	0	29	9.2	11.3	1.0
Sandusky	29.26	29.95	−0.13	36.8	− 4.0	65	9	41	25	20	33	29	.....	.....	.....	.....	1.55	− 1.2	13	7,699	w.	30	nw.	12	4	4	22	8.2	0.8	0.2
Toledo	29.26	29.96	−0.11	37.2	− 2.5	64	9	43	25	20	32	27	33	29	74	2.22	− 0.4	16	10,864	w.	42	w.	23	6	3	21	7.4	2.2	0.5
Detroit	29.12	29.93	−0.13	35.7	− 2.9	61	9	40	26	30	31	24	32	28	75	2.04	− 0.6	13	11,196	nw.	40	nw.	11	2	5	23	8.1	2.3	1.1

TABLE 1.—*Climatological data for U. S. Weather Bureau stations, November, 1910*—Continued.

Stations.	Pressure in inches.			Temperature of the air, in degrees Fahrenheit.										Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.			Wind.					Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hrs.	Departure from normal.	Mean max. + + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.						
Upper Lake Region.				**32.1**	**— 2.1**											**82**	**1.96**	**— 0.4**									**8.5**		
Alpena	29.22	29.90	−0.11	33.8	+ 0.1	51	1	38	26	30	30	14	31	29	82	2.32	— 0.2	17	8,251	nw.	35	se.	23	0	2	28	9.5	17.8	7.6
Escanaba	29.29	29.97	−0.06	31.6	— 0.1	49	1	36	20	8	27	18	29	27	85	1.81	— 0.4	13	7,615	nw.	27	nw.	29	0	4	26	9.3	12.5	1.7
Grand Haven	29.26	29.96	−0.08	35.4	— 2.6	55	9	40	27	30	31	20	33	30	80	1.91	— 0.6	19	9,552	nw.	39	w.	23	0	7	23	8.5	5.5	3.0
Grand Rapids	29.17	29.96	−0.09	35.0	— 3.1	60	9	40	26	30	30	21	33	30	82	1.34	— 1.2	14	8,148	nw.	33	nw.	1	0	9	21	8.4	4.0	0.5
Lansing	28.98	29.94	.....	34.0	.....	63	9	40	21	20	28	27	31	29	86	1.37	.....	15	5,664	nw.	24	nw.	10	2	5	23	8.2	5.9	3.0
Houghton	29.23	29.98	−0.04	30.4	— 1.1	43	1	34	19	19	27	19	.....	.....	.....	1.63	— 1.2	17	5,023	nw.	21	se.	27	2	2	26	8.9	15.4	3.5
Marquette	29.16	29.97	−0.05	30.6	— 1.3	46	1	34	22	19	27	15	29	27	86	3.44	+ 0.6	23	8,739	w.	34	nw.	30	1	3	26	8.6	30.9	12.5
Port Huron	29.20	29.91	−0.14	34.8	— 2.0	60	1	40	24	20	30	26	32	29	80	1.80	— 0.9	15	8,968	nw.	38	nw.	10	0	2	28	9.3	4.7	0.8
Sault Sainte Marie	29.22	29.93	−0.08	30.5	— 0.2	45	1	34	19	4	26	14	29	26	82	2.54	— 0.4	17	7,274	nw.	34	nw.	10	0	1	29	9.8	14.6	8.5
Chicago	29.10	30.01	−0.06	36.0	— 3.2	67	9	42	20	30	30	29	32	28	75	1.31	— 1.2	12	9,377	w.	39	w.	23	5	10	15	6.7	1.2	1.0
Milwaukee	29.26	30.02	−0.03	32.6	— 3.5	58	9	38	19	30	27	23	30	26	76	1.63	— 0.4	9	7,634	w.	42	se.	27	6	8	16	7.0	0.5	0.1
Green Bay	29.30	29.98	−0.06	30.2	— 2.3	48	9	35	19	6	25	19	28	24	79	2.65	+ 0.7	11	6,808	nw.	31	n.	1	0	5	25	8.9	8.3	3.2
Duluth	28.78	30.04	0.00	23.9	— 5.4	42	24	29	6	30	19	21	22	20	85	1.18	— 0.4	11	8,712	nw.	44	nw.	11	2	9	19	7.8	9.7	3.9
North Dakota.				**23.7**	**— 0.9**											**85**	**0.46**										**6.7**		
Moorhead	29.05	30.10	+0.03	24.0	— 0.4	44	8	31	2	30	17	33	22	21	91	0.49	— 0.5	4	6,003	nw.	38	se.	3	6	9	15	6.6	3.8	0.4
Bismarck	28.27	30.12	+0.05	26.6	+ 0.6	63	8	35	— 1	30	18	38	22	19	79	0.14	— 0.5	2	7,119	nw.	33	w.	4	6	8	16	6.7	0.2	.....
Devils Lake	28.45	30.09	+0.03	20.7	— 1.9	54	8	28	— 6	29	14	35	19	16	86	0.55	— 0.2	6	7,734	nw.	38	w.	4	5	9	16	6.9	5.3	3.2
Williston	.....	.....	.....	23.4	— 1.8	60	6	32	−10	28	16	36	.....	.....	.....	0.66	+ 0.1	4	2,869	nw.	26	n.	1	7	6	17	.....	6.4	6.0
Upper Miss. Valley.				**34.9**	**— 2.8**											**78**	**0.60**	**— 1.5**									**5.7**		
Minneapolis	.....	.....	.....	27.8	.....	50	4	34	8	30	22	21	.....	.....	.....	0.59	— 0.6	8	8,726	nw.	37	se.	3	9	5	16	6.4	3.9	.....
St. Paul	29.11	30.05	−0.01	28.1	— 2.8	47	23	34	8	30	22	19	25	21	77	0.48	— 0.8	7	8,821	nw.	39	nw.	30	7	10	13	6.3	4.0	T.
La Crosse	29.23	30.02	−0.05	29.8	— 4.0	52	7	36	14	30	24	24	.....	.....	.....	0.46	— 1.1	5	4,386	nw.	20	nw.	30	7	7	16	6.7	1.7	.....
Madison	28.92	30.01	−0.05	30.0	— 4.2	52	9	35	15	30	25	25	27	25	82	1.59	— 0.2	10	8,016	nw.	31	nw.	30	8	7	15	6.9	2.7	0.1
Charles City	28.95	30.06	−0.02	29.2	— 3.8	52	7	37	10	30	21	26	26	22	81	0.29	— 1.1	2	5,317	nw.	25	nw.	30	5	9	16	6.9	1.8	.....
Davenport	29.37	30.05	−0.03	33.8	— 3.7	63	9	42	14	30	26	29	30	25	74	0.22	— 1.5	4	5,652	nw.	26	nw.	30	14	4	12	5.3	T.	.....
Des Moines	29.12	30.05	−0.03	35.4	— 1.4	62	7	44	15	30	26	36	30	24	67	0.53	— 1.0	5	5,181	nw.	29	nw.	30	7	14	9	6.1	0.4	.....
Dubuque	29.29	30.07	0.00	32.4	— 3.6	59	9	39	16	30	26	29	28	24	77	0.53	— 1.3	7	4,840	nw.	22	n.	30	11	7	12	5.7	1.7	.....
Keokuk	29.38	30.08	−0.01	37.6	— 1.8	68	7	46	18	30	29	34	31	26	68	0.23	— 1.6	3	5,341	nw.	28	w.	1	9	12	9	5.0	.....	.....
Cairo	29.69	30.08	−0.04	45.2	— 1.7	74	27	54	27	30	36	34	38	30	61	0.55	— 3.5	4	6,124	nw.	34	nw.	27	14	5	11	4.7	T.	.....
La Salle	29.46	30.06	−0.02	34.5	— 3.3	65	9	42	18	30	27	32	.....	.....	.....	0.77	— 1.9	8	5,879	w.	28	nw.	30	12	5	13	5.4	T.	T.
Peoria	29.37	30.05	−0.04	35.2	— 2.3	68	9	45	15	12	26	36	30	27	79	0.79	— 1.8	6	5,618	nw.	28	nw.	30	11	12	7	5.0	T.	.....
Springfield, Ill	29.34	30.05	−0.05	38.0	— 2.7	71	9	47	19	30	29	34	32	27	68	1.57	— 1.1	4	6,706	nw.	31	nw.	30	12	7	11	5.1	T.	.....
Hannibal	29.48	30.07	−0.02	38.0	— 2.5	71	9	48	18	17	28	38	.....	.....	.....	0.13	— 1.8	3	6,278	nw.	29	nw.	30	10	11	9	5.2	T.	.....
St. Louis	29.43	30.05	−0.05	42.0	— 1.4	73	9	50	21	30	34	31	36	30	68	0.30	— 2.6	3	8,143	nw.	36	nw.*	30	14	6	10	4.8	.....	.....
Missouri Valley.				**38.8**	**+ 0.8**											**66**	**0.16**	**— 1.2**									**4.5**		
Columbia, Mo	29.21	30.06	−0.03	40.6	— 1.8	75	9	52	19	17	29	37	.....	.....	.....	0.33	— 2.0	3	6,122	nw.	33	nw.	30	17	7	6	3.7	.....	.....
Kansas City	29.00	30.06	−0.03	43.8	+ 2.3	73	8	53	21	30	34	31	36	29	60	0.28	— 1.6	2	8,291	nw.	41	n.	27	9	17	4	4.8	0.2	.....
St. Joseph	29.01	30.06	.....	41.0	.....	73	8	51	20	30	31	37	34	27	62	0.20	.....	1	6,075	nw.	32	nw.	30	8	17	5	4.6	T.	.....
Springfield, Mo	28.63	30.06	−0.04	45.0	+ 0.6	73	9	55	20	28	35	36	38	30	62	0.14	— 2.5	3	7,382	nw.	32	se.	4	14	10	6	3.7	T.	.....
Iola	29.00	30.07	−0.02	45.0	+ 2.0	75	8	58	20	28	32	37	.....	.....	.....	0.05	— 1.3	1	4,984	n.	32	n.	27	14	13	3	4.0	T.	.....
Topeka	.....	.....	.....	43.4	+ 1.7	75	8	54	20	28	33	35	.....	.....	.....	0.25	— 1.0	1	6,160	nw.	32	s.	26	19	9	2	2.3	T.	.....
Lincoln	28.78	30.08	0.00	39.0	+ 1.0	76	8	51	18	30	27	38	32	25	64	0.10	— 0.8	4	6,773	n.	34	n.	30	11	10	9	5.1	0.3	.....
Omaha	28.87	30.08	0.00	38.2	+ 0.5	69	8	48	18	30	29	35	32	25	63	0.17	— 0.9	2	6,401	nw.	36	nw.	9	8	13	9	5.4	.....	.....
Valentine	27.30	30.09	+0.01	34.6	+ 0.9	72	25	48	7	30	21	40	28	22	73	0.12	— 0.6	3	5,674	nw.	28	nw.	26	17	11	2	3.3	0.2	.....
Sioux City	28.84	30.03	+0.01	33.8	— 0.5	60	7	43	12	30	25	34	29	24	70	0.15	— 0.8	2	8,811	nw.	49	se.	3	13	12	5	4.8	T.	.....
Pierre	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huron	28.67	30.12	+0.04	29.8	+ 2.4	57	3	40	5	30	20	36	26	21	74	0.17	— 0.4	3	6,905	nw.	48	se.	3	8	9	13	6.1	0.6	.....
Yankton	28.73	30.09	+0.01	33.4	— 0.1	63	8	44	11	30	23	37	.....	.....	.....	0.02	— 0.8	1	5,765	nw.	33	se.	3	6	17	7	5.9	T.	.....
Northern Slope.				**34.4**	**+ 2.4**											**73**	**0.83**	**0.0**									**6.6**		
Havre	27.34	30.05	+0.02	29.4	— 1.2	61	7	38	— 3	30	21	40	26	24	83	0.09	— 0.1	9	5,439	e.	38	sw.	6	1	8	21	8.0	5.2	2.1
Miles City	27.49	30.11	+0.04	34.0	+ 3.1	66	6	42	3	30	26	39	29	26	80	1.13	+ 0.5	8	3,442	ne.	34	s.	20	7	18	5	4.9	6.4	1.5
Helena	25.76	30.04	−0.06	34.0	+ 1.3	61	10	41	2	27	27	27	30	25	73	1.64	+ 0.9	10	4,137	w.	37	w.	22	5	9	16	6.8	15.3	6.8
Kalispell	26.92	30.03	−0.04	34.9	+ 2.9	56	2	40	18	26	30	21	32	29	83	1.68	— 0.2	13	2,560	w.	24	w.	23	2	5	23	8.4	7.4	1.2
Rapid City	26.60	30.10	+0.02	33.9	+ 0.3	68	8	44	11	18	24	35	28	22	68	0.45	0.0	7	3,741	w.	28	w.	22	6	6	18	7.5	1.7	1.2
Cheyenne	23.98	30.02	−0.05	39.0	+ 4.1	66	25	50	6	27	28	37	31	22	57	0.29	— 0.1	4	8,098	w.	54	w.	23	5	13	12	6.7	2.8	.....
Lander	24.62	30.08	−0.02	35.4	+ 6.7	64	8	50	7	27	21	40	28	21	63	T.	— 0.6	0	2,591	ne.	37	sw.	8	5	19	6	5.3	T.	.....
Sheridan	26.09	30.08	.....	34.0	.....	65	6	44	10	27	24	35	30	27	83	0.84	.....	11	3,279	nw.	48	nw.	22	4	11	15	7.1	1.2	0.3
Yellowstone Park	23.84	30.07	−0.04	31.2	+ 1.9	55	11	40	0	27	23	27	27	23	73	1.52	+ 0.1	14	5,658	s.	31	sw.	7	4	9	17	7.3	12.6	5.0
North Platte	27.11	30.11	+0.03	37.8	+ 2.7	73	8	53	11	18	23	47	29	23	68	0.11	— 0.3	1	4,501	w.	29	nw.	4	13	12	5	4.4	T.	.....
Middle Slope.				**45.9**	**+ 4.1**											**55**	**0.14**	**— 0.8**									**4.3**		
Denver	24.71	30.00	−0.06	45.6	+ 6.4	75	3	58	22	27	33	38	35	21	47	0.16	— 0.4	3	5,980	s.	42	w.	23	7	16	7	5.3	1.3	.....
Pueblo	25.29	30.01	−0.04	45.0	+ 5.7	78	3	60	16	28	30	54	35	23	51	0.53	+ 0.2	6	4,562	nw.	35	w.	8	15	9	6	4.6	2.4	.....
Concordia	28.59	30.10	+0.02	41.4	+ 1.5	79	8	54	15	28	29	46	34	28	65	0.15	— 0.8	2	4,182	n.	26	s.	3	4	22	4	5.3	T.	.....
Dodge City	27.42	30.06	−0.01	45.8	+ 5.3	80	26	60	17	28	32	45	35	26	57	0.02	— 0.5	1	7,044	n.	39	n.	26	15	11	4	4.0	T.	.....
Wichita	28.63	30.08	0.00	46.4	+ 2.6	79	26	59	19	28	34	38	38	28	55	T.	— 1.2	0	5,735	se.	35	n.	27	13	13	4	4.3	T.	.....
Oklahoma	28.76	30.06	−0.02	51.0	+ 3.1	81	26	64	22	28	38	38	41	32	57	T.	— 2.2	0	10,025	s.	44	n.	27	21	8	1	2.5	.....	.....
Southern Slope.				**54.3**	**+ 3.4**											**60**	**0.25**	**— 1.1**									**3.8**		
Abilene	28.23	30.06	−0.01	56.1	+ 3.5	82	13	68	29	28	45	40	46	38	60	0.38	— 0.9	3	6,790	s.	32	sw.	1	17	6	7	3.7	.....	.....
Amarillo	26.28	30.04	−0.01	49.0	+ 5.2	82	12	63	24	30	35	39	38	30	60	0.28	— 0.9	2	7,642	s.	38	nw.	27	23	6	1	3.2	2.7	.....
Del Rio	29.03	30.02	−0.03	62.2	+ 2.9	92	24	76	36	28	48	48	.....	.....	.....	0.12	— 1.7	1	4,474	se.	27	n.	27	13	12	5	4.2	.....	.....
Roswell	26.40	30.06	+0.03	50.0	+ 1.9	82	24	66	24	28	34	50	40	31	60	0.22	— 0.9	2	3,536	s.	26	nw.	28	15	10	5	4.2	.....	.....
Southern Plateau.				**51.2**	**+ 2.3**											**59**	**0.90**	**+ 0.2**									**2.6**		
El Paso	26.22	30.00	0.00	55.0	+ 4.1	78	1	69	31	22	41	38	41	26	38	0.03	— 0.6	2	6,279	nw.	42	w.	26	22	8	0	2.1	.....	.....
Santa Fe	23.27	30.08	+0.05	41.6	+ 3.4	63	3	53	24	30	30	32	32	25	62	0.86	+ 0.1	5	6,423	ne.	39	ne.	28	20	7	3	2.9	2.4	.....
Flagstaff	23.38	30.04	+0.02	39.9	+ 5.3	68	2	55	16	30	25	48	31	26	72	1.28	— 0.1	7	3,754	e.	31	sw.	25	18	7	5	3.4	1.5	T.
Phoenix	28.82	29.98	0.00	60.2	+ 1.5	88	2	74	39	27	47	40	52	47	68	1.61	+ 0.6	5	2,105	e.	14	se.	4	22	3	5	2.5	.....	.....
Yuma	29.82	29.97	−0.01	62.5	+ 0.6	94	2	77	37	27	48	44	52	45	60	1.58	+ 1.3	3	3,630	n.	36	s.	13	26	2	2	1.2	.....	.....
Independence	26.01	30.02	−0.03	48.0	— 1.2	76	1	62	22	29	34	42	39	30	56	0.02	— 0.3	1	3,552	s.	34	s.	25	20	9	1	3.6	.....	.....
Middle Plateau.				**43.7**	**+ 4.5**											**61**	**0.99**	**0.0**									**5.0**		
Reno	25.48	30.04	−0.07	45.4	+ 4.4	72	2	57	23	26	33	38	37	29	59	0.54	— 0.6	3	4,479	w.	39	w.	21	8	14	8	5.1	T.	.....
Tonopah	24.07	30.01	.....	44.6	.....	65	2	52	21	26	37	23	36	26	51	0.36	— 0.6	3	5,219	se.	34	se.	25	10	14	6	5.1	T.	.....
Winnemucca	25.64	30.08	−0.06	42.4	+ 4.9	71	2	56	15	5	29	45	35	28	67	0.81	+ 0.1	6	4,833	sw.	39	sw.	24	9	3	18	6.4	0.2	.....
Modena	24.65	30.05	−0.03	42.0	+ 3.0	68	2	55	19	27	29	43	34	27	66	1.01	+ 0.1	6	6,455	w.	46	sw.	25	9	10	11	6.0	0.1	.....
Salt Lake City	25.65	30.05	−0.07	46.6	+ 6.2	70	2	56	23	27	38	29	38	29	54	0.99	— 0.4	7	4,843	nw.	35	s.	25	12	10	8	4.6	0.1	.....
Durango	23.69	30.08	+0.04	40.6	+ 3.4	66	3	54	18	28	27	40	32	26	69	1.92	+ 0.8	8	3,568	nw.	20	sw.	23	16	8	6	3.9	4.6	T.
Grand Junction	25.42	30.04	−0.04	45.1	+ 5.2	66	9	57	26	29	34	36	37	30	63	1.30	+ 0.8	7	2,413	nw.	20	sw.	3	13	12	5	4.2	.....	.....
Northern Plateau.				**41.6**	**+ 2.2**											**72**	**2.95**	**+ 1.5**									**8.3**		
Boise	27.22	30.12	−0.05	42.0	+ 2.4	72	2	50	20	26	34	34	38	32	69	2.53	+ 1.7	16	3,705	se.	26	nw.	23	5	4	21	7.9	3.0	.....
Lewiston	29.25	30.07	−0.05	42.9	+ 2.0	66	2	48	30	14	37	25	.....	.....	.....	3.51	+ 2.2	18	3,264	e.	48	w.	2	2	3	25	8.9	T.	.....
Pocatello	25.51	30.08	−0.06	40.0	+ 3.7	66	2	49	15	27	31	33	34	28	64	1.32	+ 0.8	9	6,924	se.	33	sw.	19	5	8	17	7.0	1.4	.....
Spokane	27.98	30.07	−0.03	39.2	+ 1.9	60	2	44	26	14	34	24	37	34	80	3.71	+ 1.4	19	4,346	sw.	29	w.	7	0	1	29	9.3	4.3	T.
Walla Walla	28.99	30.08	−0.05	43.9	+ 1.0	68	10	50	29	5	38	31	40	35	73	3.69	+ 1.6	17	4,451	s.	32	s.	21	4	2	24	8.2	0.3	.....
N. Pacific Coast Region.				**45.4**	**+ 0.3**											**87**	**9.51**	**+ 2.2**									**8.4**		
North Head	29.75	29.98	−0.07	47.0	— 0.7	58	1	51	35	24	43	13	46	44	89	9.12	+ 2.8	23	14,788	e.	84	se.	22	1	4	25	8.8	.....	.....
Port Crescent	29.66	29.95	−0.05	41.6	— 0.7	56	6	48	27	26	36	18	.....	.....	.....	8.92	+ 1.5	19	3,735	s.	46	sw.	22	0	11	19	7.7	.....	.....
Seattle	29.86	30.00	−0.04	45.5	+ 1.0	60	1	50	32	24	41	13	44	42	88	8.47	+ 2.6	18	6,372	se.	40	sw.	23	0	6	24	8.9	.....	.....

TABLE I.—*Climatological data for U. S. Weather Bureau stations, November, 1910*—Continued.

Stations.	Pressure, in inches.			Temperature of the air, in degrees Fahrenheit.								Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.			Wind.				Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.	Snow on ground at end of month.
	Actual, reduced to mean of 24 hours.	Sea level, reduced to mean of 24 hours.	Departure from normal.	Mean max. + mean min. ÷ 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.				Total.	Departure from normal.	Days with 0.01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.					
N. P. Coast Reg.—Con.																											
Tacoma	29.77	30.00	−0.04	44.8	+ 0.7	62	1	50	28	24	39	20	43	42	90	9.65	+ 1.1	20	3,653	sw.	25	sw.	23	5	2	23	8.0	....	....
Tatoosh Island	29.82	29.91	−0.06	46.4	+ 0.5	56	9	50	36	27	43	17	44	42	86	12.98	+ 0.9	22	14,141	ne.	72	se.	7	1	5	24	8.7	....	....
Portland, Oreg.	29.86	30.03	−0.07	46.8	+ 1.2	65	9	52	34	15	42	23	44	41	82	8.24	+ 1.8	20	4,898	se.	38	sw.	7	1	3	26	8.6	....	....
Roseburg	29.50	30.05	−0.07	46.0	+ 0.4	67	10	53	28	26	39	27	45	43	88	9.19	+ 4.8	21	2,031	s.	18	se.	26	0	11	19	8.1	....	....
Middle Pac. Coast Reg'n.				**53.1**	**− 0.3**										**80**	**1.68**	**− 1.2**									**6.0**		
Eureka	30.02	30.09	−0.02	50.6	− 0.4	66	9	56	34	26	45	20	48	46	85	6.86	+ 1.2	15	4,699	se.	33	n.	3	2	8	20	7.9	....	....
Mount Tamalpais	27.60	30.09	0.00	49.2	.....	69	1	55	35	25	43	20	45	41	77	0.63	− 1.8	7	10,502	nw.	65	nw.	11	6	10	14	6.6	....	....
Point Reyes Light	29.53	30.05	.....	52.4	.....	75	1	56	44	26	49	20	.....	.....	.....	1.18	.....	10	11,277	nw.	54	nw.	25	5	9	16	6.9	....	....
Red Bluff	29.70	30.07	−0.04	53.6	+ 0.2	77	1	62	35	26	45	32	49	44	74	2.78	− 0.4	9	3,200	nw.	20	se.	24	12	4	14	5.7	....	....
Sacramento	30.00	30.07	−0.02	53.2	− 0.2	78	1	64	34	26	43	32	51	48	82	0.17	− 2.0	4	4,085	se.	22	se.	27	9	11	10	5.4	....	....
San Francisco	29.92	30.09	0.00	54.8	− 0.7	76	1	60	44	26	49	23	50	47	81	0.48	− 2.0	6	4,139	w.	25	s.	21	6	13	11	6.0	....	....
San Jose	29.93	30.08	.....	53.2	− 1.2	80	1	65	33	26	42	38	.....	.....	.....	0.28	− 1.6	3	3,136	nw.	21	nw.	23	12	12	6	4.0	....	....
Southeast Farallon	30.07	30.10	.....	52.8	.....	60	1	55	48	24	51	9	.....	.....	.....	0.58	− 1.9	6	8,566	nw.	44	nw.	25	8	12	10	5.7	....	....
S. Pacific Coast Region.				**57.7**	**+ 0.6**				"						**73**	**0.26**	**− 1.0**									**4.5**		
Fresno	29.72	30.08	+0.02	54.9	+ 0.3	78	1	67	34	19	43	31	49	44	73	0.24	− 0.8	3	2,392	nw.	15	nw.	11	12	14	4	4.1	....	....
Los Angeles	29.66	30.03	+0.01	60.3	+ 1.9	85	29	69	43	27	52	35	52	47	72	0.15	− 1.3	4	3,579	ne.	19	nw.	18	13	8	9	4.6	....	....
San Diego	29.93	30.02	0.00	58.7	− 0.3	74	3	66	43	27	52	23	54	50	78	0.40	− 0.4	6	3,631	nw.	21	nw.	21	15	10	5	3.6	....	....
San Luis Obispo	29.86	30.08	+0.02	57.0	+ 0.7	80	23	67	33	27	47	38	50	45	70	0.27	− 1.4	3	3,508	n.	21	n.	20	10	7	13	5.7	....	....
West Indies.																													
Grand Turk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Juan	29.85	29.93	+0.03	78.8	.....	89	20	85	69	24	72	17	.....	.....	.....	1.63	− 4.9	8	4,674	s.	23	se.	19	21	5	4	3.2	....	....
Panama.																													
Christobal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Culebra	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ancon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alhajuela	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bohio	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ga un	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.80 inch in 1 hour, during November, 1910, at all stations furnished with self-recording gages.*

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated. 5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Abilene, Tex.	15	.....	.....	0.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.17	.....	.....	.....
Albany, N. Y.	9	.....	.....	0.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.12	.....	.....	.....
Alpena, Mich.	28–29	.....	.....	0.70†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Amarillo, Tex.	5	.....	.....	0.27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Anniston, Ala.	27	1:23 p. m.	3:20 p. m.	0.61	2:04 p. m.	2:12 p. m.	0.05	0.18	0.37	.....	.....	.....	.....	.....	.....	.....	.....	0.12	.....	.....	.....
Asheville, N. C.	28	.....	.....	0.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.12	.....	.....	.....
Atlanta, Ga.	28	.....	.....	0.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.20	.....	.....	.....
Atlantic City, N. J.	28	.....	.....	0.56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Augusta, Ga.	28	5:40 a. m.	7:35 a. m.	0.58	5:57 a. m.	6:13 a. m.	0.02	0.11	0.18	0.37	0.41	.....	.....	.....	.....	.....	.....	0.13	.....	.....	.....
Baltimore, Md.	28	.....	.....	0.23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.12	.....	.....	.....
Bentonville, Ark.	4	.....	.....	0.16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.20†	.....	.....	.....
Binghamton, N. Y.	4	.....	.....	1.63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.54	.....	.....	.....
Birmingham, Ala.	27	.....	.....	0.78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Bismarck, N. Dak.	8	.....	.....	0.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Block Island, R. I.	3–4	8:15 p. m.	7:30 p. m.	3.77	2:25 p. m.	3:45 p. m.	2.35	0.07	0.12	0.20	0.33	0.40	0.45	0.57	0.64	0.65	0.66	0.83	1.17	.....	.....
Boise, Idaho	11	.....	.....	0.43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.10	.....	.....	.....
Boston, Mass.	4	.....	.....	1.73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.31	.....	.....	.....
Buffalo, N. Y.	2	.....	.....	0.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.18	.....	.....	.....
Burlington, Vt.	29–30	.....	.....	0.80†	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Cairo, Ill.	27	.....	.....	0.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.24	.....	.....	.....
Canton, N. Y.	10	.....	.....	0.54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.13	.....	.....	.....
Charles City, Iowa	1	.....	.....	0.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Charleston, S. C.	28	.....	.....	0.52	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.41	.....	.....	.....
Charlotte, N. C.	2	.....	.....	0.21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.15	.....	.....	.....
Chattanooga, Tenn.	27	7:20 p. m.	10:37 p. m.	0.53	8:30 p. m.	8:45 p. m.	0.05	0.17	0.32	0.38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cheyenne, Wyo.	26	.....	.....	0.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Chicago, Ill.	27	.....	.....	0.68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.37	.....	.....	.....
Cincinnati, Ohio	27	.....	.....	1.06	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.31	.....	.....	.....
Cleveland, Ohio	24	.....	.....	0.50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.25	.....	.....	.....
Columbia, Mo.	20	.....	.....	0.19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Columbia, S. C.	28	.....	.....	0.18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.16	.....	.....	.....
Columbus, Ohio	27	.....	.....	0.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.15	.....	.....	.....
Concord, N. H.	29–30	.....	.....	1.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Concordia, Kans.	19–20	.....	.....	0.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	.....	.....	.....
Corpus Christi, Tex.	5	.....	.....	0.26	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.20	.....	.....	.....
Davenport, Iowa	20	.....	.....	0.07	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Del Rio, Tex.	25	.....	.....	0.15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	.....	.....	.....
Denver, Colo.	14–15	.....	.....	0.08	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Des Moines, Iowa	4	.....	.....	0.42	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Detroit, Mich.	10	.....	.....	0.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.30	.....	.....	.....
Devil's Lake, N. Dak.	19–20	.....	.....	0.30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Dodge City, Kans.	16	.....	.....	0.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Dubuque, Iowa	26–27	.....	.....	0.22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Duluth, Minn.	4	.....	.....	0.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Durango, Colo.	14–15	.....	.....	0.87	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.14	.....	.....	.....
Eastport, Me.	5	.....	.....	0.34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.33	.....	.....	.....
Elkins, W. Va.	24	.....	.....	0.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.01	.....	.....	.....
El Paso, Tex.	5	.....	.....	0.02	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.26	.....	.....	.....
Erie, Pa.	10	.....	.....	0.71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	*	.....	.....	.....
Escanaba, Mich.	27–28	.....	.....	1.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.32	.....	.....	.....
Eureka, Cal.	8	.....	.....	0.57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Evansville, Ind.	27	10:00 a. m.	12:45 p. m.	0.60	10:03 a. m.	10:12 a. m.	0.01	0.29	0.39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, etc., during November, 1910, etc.*—Continued.

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated. 5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Flagstaff, Ariz.	13-14			0.82														*			
Fort Smith, Ark.	15			0.35														0.12			
Fort Worth, Tex.	5			0.07														0.05			
Fresno, Cal.	12			0.05														0.05			
Galveston, Tex.	27	2:45 p. m.	3:10 p. m.	0.30	2:51 p. m.	2:57 p. m.	0.01	0.25													
Grand Haven, Mich.	27-28			0.43														*			
Grand Junction, Colo.	14			0.49														0.18			
Grand Rapids, Mich.	1			0.11														0.08			
Green Bay, Mich.	26-27			1.53														*			
Hannibal, Mo.	20			0.07														0.02			
Harrisburg, Pa.	28			0.36														0.06			
Hartford, Conn.	4			1.70														0.37			
Hatteras, N. C.	3			0.19														0.13			
Havre, Mont.	25-26			0.20														*			
Helena, Mont.	24-25			0.86														*			
Houghton, Mich.	23			0.63														*			
Huron, S. Dak.	13			0.06														*			
Independence, Cal.	12			0.02														*			
Indianapolis, Ind.	27			1.29														0.33			
Iola, Kans.	20			0.05														0.04			
Jacksonville, Fla.	19			0.87														0.36			
Jupiter, Fla.	19			0.44														0.42			
Kalispell, Mont.	9-10			0.36														*			
Kansas City, Mo.	20			0.25														0.10			
Keokuk, Iowa.	20			0.19														*			
Key West, Fla.	7			0.92														0.63			
Knoxville, Tenn.	27			0.28														0.20			
La Crosse, Wis.	1			0.36†														*			
Lander, Wyo.	13			T.														T.			
La Salle, Ill.	26			0.31														0.27			
Lewiston, Idaho.	21			0.24														0.18			
Lexington, Ky.	27			1.30														0.28			
Lincoln, Nebr.	4			0.03														0.03			
Little Rock, Ark.	15			0.04														0.02			
Los Angeles, Cal.	3			0.08														0.08			
Louisville, Ky.	27	11:35 a. m.	6:15 p. m.	1.84	3:04 p. m. 4:57 p. m.	3:34 p. m. 5:12 p. m.	0.12 0.28	0.11 0.09	0.15 0.47	0.22 0.53	0.52	0.69	0.79								
Lynchburg, Va.	2			0.25														0.22			
Macon, Ga.	28			0.34														0.33			
Madison, Wis.	27			0.70														0.18			
Marquette, Mich.	29-30			0.87														*			
Memphis, Tenn.	5			0.72														0.51			
Meridian, Miss.	5			1.09														0.61			
Milwaukee, Wis.	27			0.80														0.21			
Minneapolis, Minn.	4			0.16														*			
Mobile, Ala.	5			1.12														0.46			
Modena, Utah.	18			0.21														0.13			
Montgomery, Ala.	28			0.59														0.51			
Moorhead, Minn.	9			0.26														*			
Mount Tamalpais, Cal.	24			0.25														0.06			
Mount Weather, Va.	27-28			0.69														*			
Nantucket, Mass.	4			1.14														0.26			
Nashville, Tenn.	27			0.79														0.31			
New Haven, Conn.	4			1.71														0.19			
New Orleans, La.	27	8:22 p. m.	9:55 p. m.	1.50	8:23 p. m.	9:08 p. m.	0.01	0.25	0.41	0.67	0.71	0.78	0.88	1.03	1.25	1.40					
New York, N. Y.	3			2.82														0.37			
Norfolk, Va.	3			0.32														0.19			
Northfield, Vt.	2-3			1.06														*			
North Head, Wash.	29			1.42														0.52			
North Platte, Nebr.	19			0.11														0.06			
Oklahoma, Okla.	15			T.														T.			
Omaha, Nebr.	20			0.11														*			
Oswego, N. Y.	10			0.40														0.14			
Palestine, Tex.	16			1.25														0.47			
Parkersburg, W. Va.	27			0.43														0.27			
Pensacola, Fla.	5	3:10 p. m.	9:45 p. m.	1.11	7:08 p. m.	7:50 p. m.	0.17	0.06	0.10	0.24	0.45	0.70	0.74	0.77	0.87	0.91					
Peoria, Ill.	27	2:25 a. m.	6:32 a. m.	0.60	2:42 a. m.	2:56 a. m.	0.05	0.12	0.31	0.42											
Philadelphia, Pa.	4			1.15														0.27			
Phoenix, Ariz.	13			0.96														0.36			
Pierre, S. Dak.																		*			
Pittsburg, Pa.	27-28			0.52														0.20			
Pocatello, Idaho.	8			0.47														0.15			
Point Reyes Light, Cal.	24			0.43														0.17			
Port Huron, Mich.	10			0.44														0.15			
Portland, Me.	4			0.43														0.26			
Portland, Oreg.	10			1.52														0.23			
Providence, R. I.	4			1.46														*			
Pueblo, Colo.	15-16			0.23														0.20			
Raleigh, N. C.	3			0.40														*			
Rapid City, S. Dak.	19			0.20																	
Red Bluff, Cal.	24	10:15 a. m.	8:00 p. m.	1.64	3:32 p. m.	4:32 p. m.	0.14	0.10	0.23	0.40	0.52	0.63	0.75	0.82	0.87	0.92	0.96	1.04			
Reno, Nev.	12			0.48														0.11			
Richmond, Va.	3			0.59														0.12			
Rochester, N. Y.	10			0.51														0.26			
Roseburg, Oreg.	27			2.50														0.27			
Roswell, N. Mex.	4			0.18														0.12			
Sacramento, Cal.	18			0.09														0.04			
St. Louis, Mo.	27			0.26														0.18			
St. Paul, Minn.	1			0.14														*			
Salt Lake City, Utah.	18			0.70														0.16			
San Antonio, Tex.	16	1:05 p. m.	4:20 p. m.	0.37	1:06 p. m.	1:13 p. m.	T.	0.32	0.35												
San Diego, Cal.	13			0.16														0.08			
Sandusky, Ohio.	10			0.41														*			
San Francisco, Cal.	24			0.25														0.10			
San Jose, Cal.	24			0.18														0.09			
San Luis Obispo, Cal.	25			0.23														0.17			
Santa Fe, N. Mex.	4-5			††0.56														*			
Sault Ste. Marie, Mich.	28			††0.71														*			
Savannah, Ga.	28			0.43														0.34			
Scranton, Pa.	3-4			†3.18														*			
Seattle, Wash.	10			0.80														0.32			
Sheridan, Wyo.	13			0.17														0.04			
Shreveport, La.	27	9:05 a. m.	10:40 a. m.	2.13	9:23 a. m.	10:24 a. m.	0.05	0.25	0.51	0.68	1.01	1.44	1.48	1.55	1.57	1.69	1.85	2.04	2.08		

TABLE II.—*Accumulated amounts of precipitation for each 5 minutes, etc., during November, 1910, etc.*—Continued.

Stations.	Date.	Total duration. From—	Total duration. To—	Total amount of precipitation.	Excessive rate. Began—	Excessive rate. Ended—	Amount before excessive rate began.	Depths of precipitation (in inches) during periods of time indicated. 5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
Sioux City, Iowa	19			0.11														*			
Southeast Farallon, Cal	24			0.34														0.12			
Spokane, Wash	7			0.16														0.11			
Springfield, Ill	26–27	6:35 p. m.	D. N. a. m.	1.45	11:17 p. m.	11:37 a. m.	0.45	0.13	0.24	0.36	0.43										
Springfield, Mo	20			0.11														0.10			
Syracuse, N. Y	3–4			0.38														*			
Tacoma, Wash	10			1.22														0.45			
Tampa, Fla	18–19	5:45 p. m.	12:20 p. m.	1.72	11:33 a. m.	11:53 a. m.	1.12	0.13	0.24	0.41	0.50										
Tatoosh Island, Wash	22			1.31														0.30			
Taylor, Tex	17			0.86														0.31			
Thomasville, Ga	18–19	7:52 a. m.	12:20 p. m.	4.23	9:05 p. m. 9:55 p. m.	9:55 p. m. 10:07 p. m.	1.17	0.06 1.00	0.14 1.08	0.19 1.10	0.28	0.31	0.42	0.51	0.65	0.74	0.85	.....			
Toledo, Ohio	10			0.75														0.27			
Tonopah, Nev	13			0.33														0.13			
Topeka, Kans	20			0.25														0.08			
Valentine, Nebr	1			0.05														*			
Vicksburg, Miss	27	1:45 p. m.	3:10 p. m.	0.81	2:10 p. m.	2:45 p. m.	0.13	0.35	0.41	0.43	0.49	0.56	0.59	0.67							
Walla Walla, Wash	10			0.93														0.25			
Washington, D. C	3–4			1.17														*			
Wichita, Kans	16			T.														T.			
Williston, N. Dak	.....																				
Wilmington, N. C	28			0.42														0.27			
Winnemucca, Nev	12			0.31														0.10			
Wytheville, Va	28			0.24														0.18			
Yankton, S. Dak	19			0.02														*			
Yellowstone Park, Wyo	25–26			0.44														*			

* Self-register not working. † Record incomplete. ‡ No precipitation occurred during month.

TABLE III.—*Data furnished by the Canadian Meteorological Service, November, 1910.*

Stations.	Pressure. Actual, reduced to mean of 24 hours.	Pressure. Sea level, reduced to mean of 24 hours.	Pressure. Departure from normal.	Temperature. Mean.	Temperature. Departure from normal.	Temperature. Mean maximum.	Temperature. Mean minimum.	Precipitation. Total.	Precipitation. Departure from normal.	Precipitation. Total snowfall.
	Ins.	*Ins.*	*Ins.*	°*F*	°*F*	°*F*	°*F*	*Ins.*	*Ins.*	*Ins.*
St. Johns, N. F	29.50	29.64	− .30	43.0	+ 6.5	47.4	38.6	10.15	+4.58	....
Sydney, C. B. I	29.65	29.69	− .26	41.0	+ 3.9	45.4	36.5	5.90	+0.46	1.0
Halifax, N. S	29.57	29.68	− .33	39.8	+ 2.5	45.4	34.2	5.21	−0.45	1.6
Grand Manan, N. B	29.66	29.71	− .30	39.4	+ 0.5	44.6	34.2	2.52	−3.10	6.0
Yarmouth, N. S	29.62	29.69	− .33	40.2	+ 0.3	45.5	34.9	2.71	−1.85	0.6
Charlottetown, P. E. I	29.64	29.68	− .28	38.2	+ 2.7	42.2	34.1	4.47	+0.50	9.9
Chatham, N. B	29.71	29.73	− .24	35.5	+ 4.5	40.1	30.8	4.03	+0.28	19.8
Father Point, Que	29.71	29.73	− .23	33.1	+ 4.2	37.0	29.3	5.84	+2.73	32.7
Quebec, Que	29.43	29.76	− .26	31.9	+ 2.9	36.1	27.7	1.41	−2.35	7.7
Montreal, Que	29.58	29.80	− .23	33.3	+ 1.5	37.1	29.5	1.92	−1.82	7.9
Stonecliffe, Ont	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa, Ont	29.55	29.88	− .14	32.1	+ 0.4	35.9	28.3	1.99	−0.55	13.3
Kingston, Ont	29.52	29.84	− .20	34.2	− 0.8	39.5	28.9	2.63	−0.61	6.5
Toronto, Ont	29.47	29.86	− .18	36.0	+ 0.4	40.8	31.2	2.52	−0.62	9.4
White River, Ont	28.57	29.93	− .05	23.5	+ 3.0	28.9	18.2	0.33	−1.52	3.2
Port Stanley, Ont	29.25	29.91	− .14	34.7	− 2.1	40.1	29.4	4.56	+1.19	26.2
Southampton, Ont	29.14	.....	.....	34.9	− 0.1	39.1	30.7	4.13	+0.43	20.5
Parry Sound, Ont	29.15	29.86	− .15	31.3	− 0.8	36.3	26.3	2.79	−1.58	14.5
Port Arthur, Ont	29.26	29.99	− .01	26.6	+ 2.6	33.2	20.0	1.29	−0.04	12.4
Winnipeg, Man	29.22	30.09	+ .05	19.9	+ 1.9	25.9	13.8	1.27	+0.19	12.7
Minnedosa, Man	28.17	30.07	+ .03	17.0	− 0.3	24.1	9.9	1.52	+0.52	15.2
Qu'Appelle, Sask	27.70	30.04	+ .04	16.9	− 1.9	23.2	10.6	1.95	+1.06	19.5
Medicine Hat, Alberta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Swift Current, Sask	27.40	30.07	+ .05	23.2	0.0	29.8	16.5	0.32	−0.37	3.2
Calgary, Alberta	26.33	29.97	− .01	26.6	+ 0.8	34.5	18.7	0.34	−0.54	3.4
Banff, Alberta	25.29	30.02	+ .06	25.3	− 0.5	32.1	18.5	0.99	−1.28	5.0
Edmonton, Alberta	27.65	30.02	+ .05	20.8	− 2.1	28.0	13.6	0.67	+0.09	6.7
Prince Albert, Sask	28.44	30.06	+ 03	16 2	+ 0.8	22.4	10.0	1.21	+0.38	12.1
Battleford, Sask	28.26	30.08	+ .06	17.5	+ 1.2	24.2	10.8	0.03	−0.55	0.3
Kamloops, B. C	28.60	29.90	− .06	37.5	+ 4.1	43.3	31.8	0.65	−0.81	3.2
Victoria, B. C	29.85	29.95	− .04	44.0	+ 0.8	48.2	39.8	7.71	+0.74	....
Barkerville, B. C	25.52	29.89	− .01	24.0	+ 0.4	29.8	18.3	3.05	−0.24	30.5
Dawson, Yukon	28.86	.....	.....	1.6	.....	7.3	−4.1	1.46	.....	14.6
Hamilton, Bermuda	29.74	29.90	− .15	65.5	− 3.2	70.3	60.7	3.30	−1.08	....

Climatological Districts of the United States.

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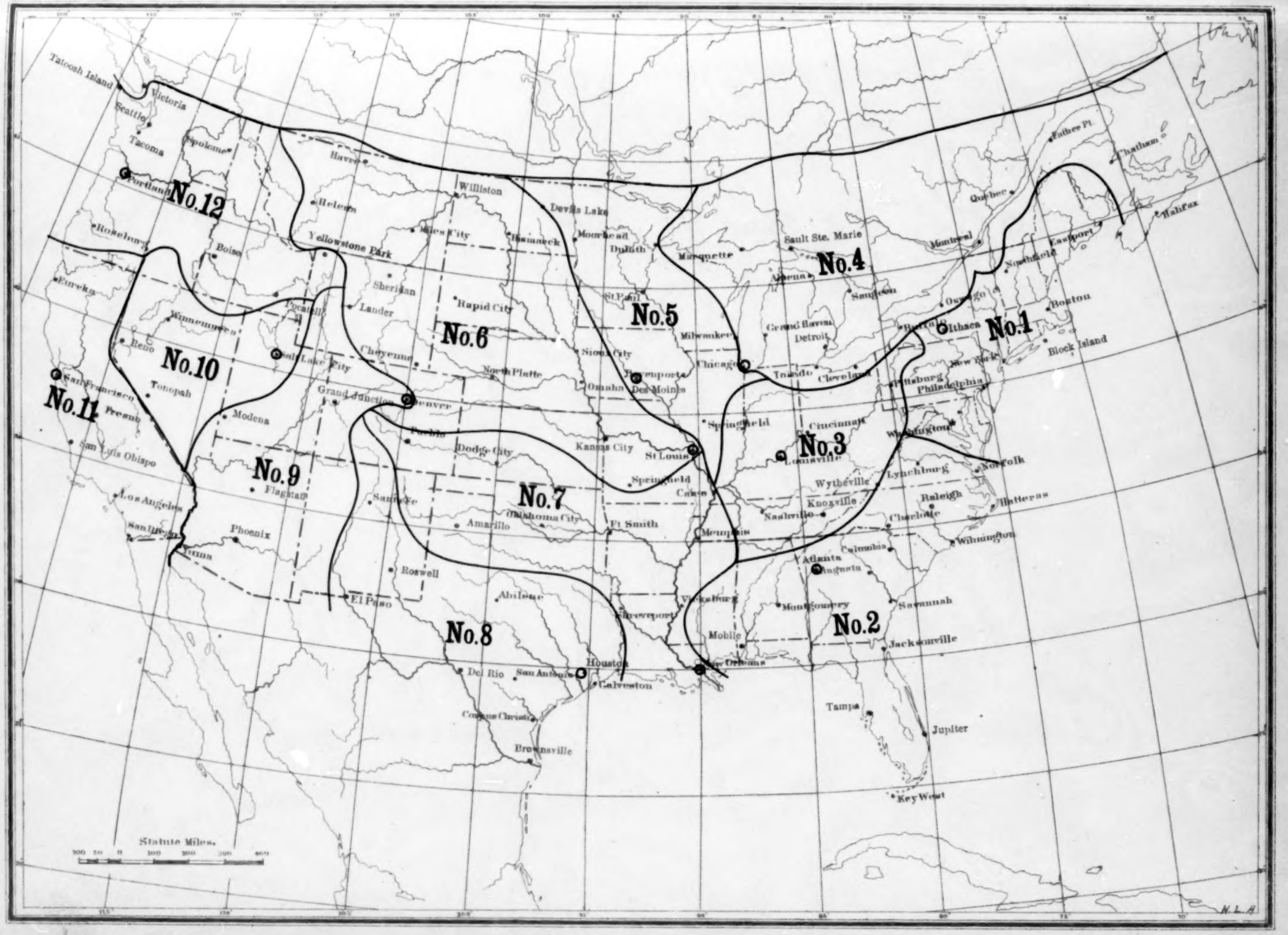
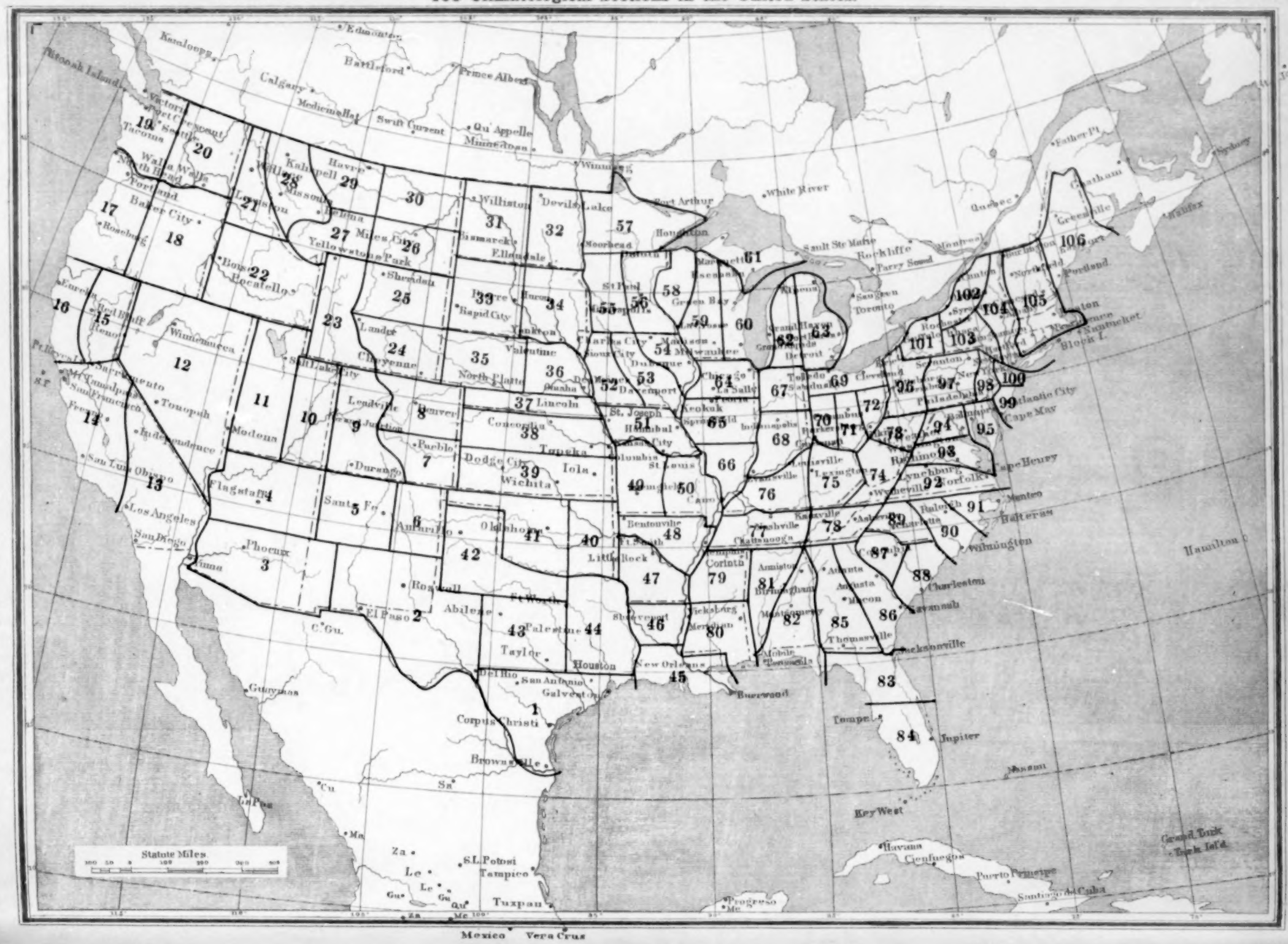


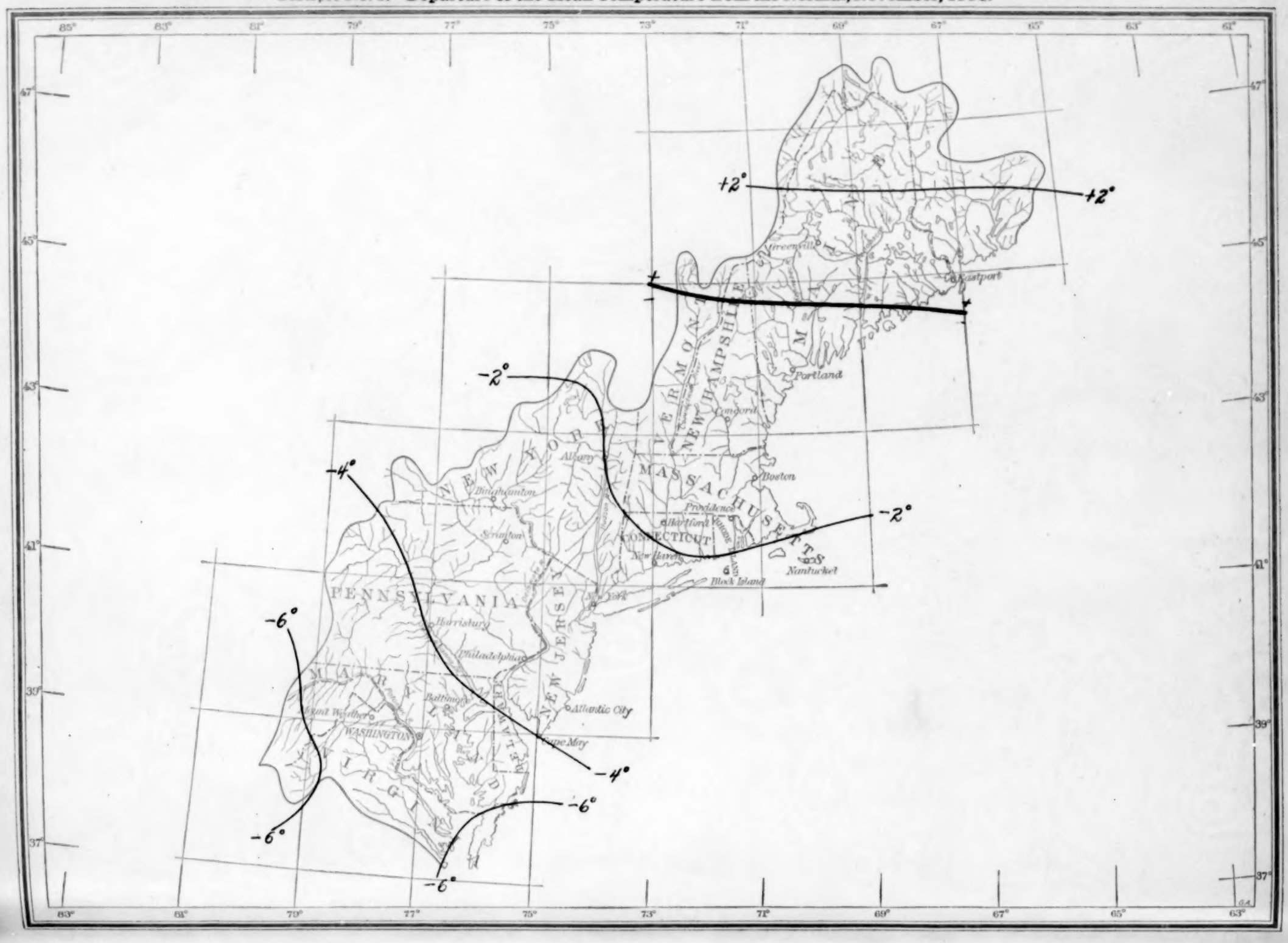


District No. 1.—Total Precipitation, November, 1910.

Mexico Vera Cruz

District No. 1.—Total Precipitation, November, 1910.

District No. 1.—Departure of the Mean Temperature from the Normal, November, 1910.



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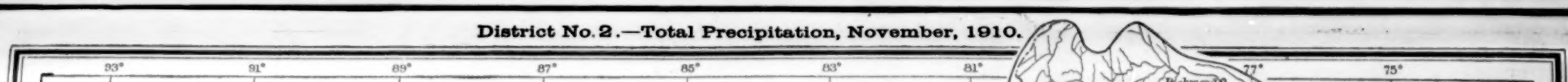
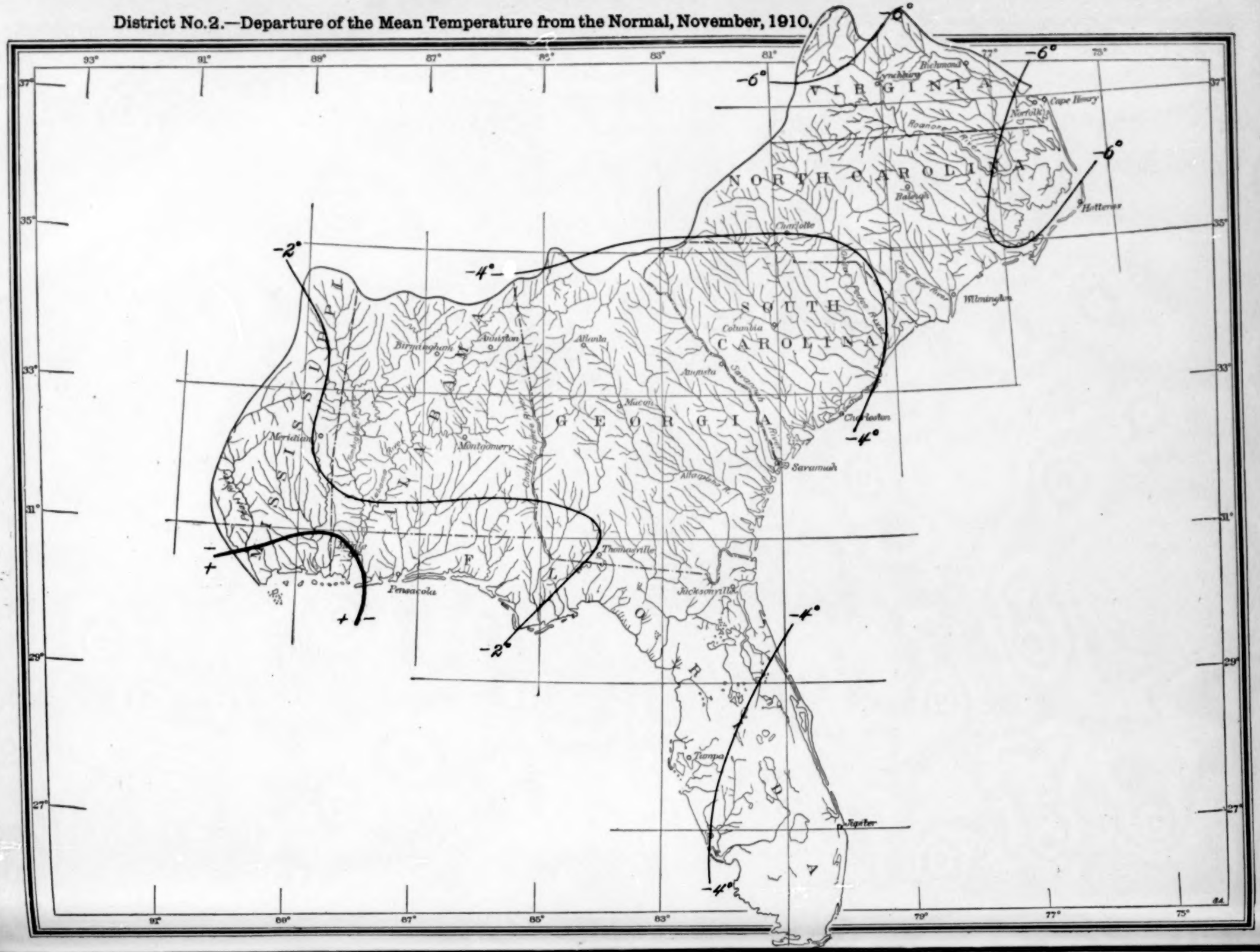
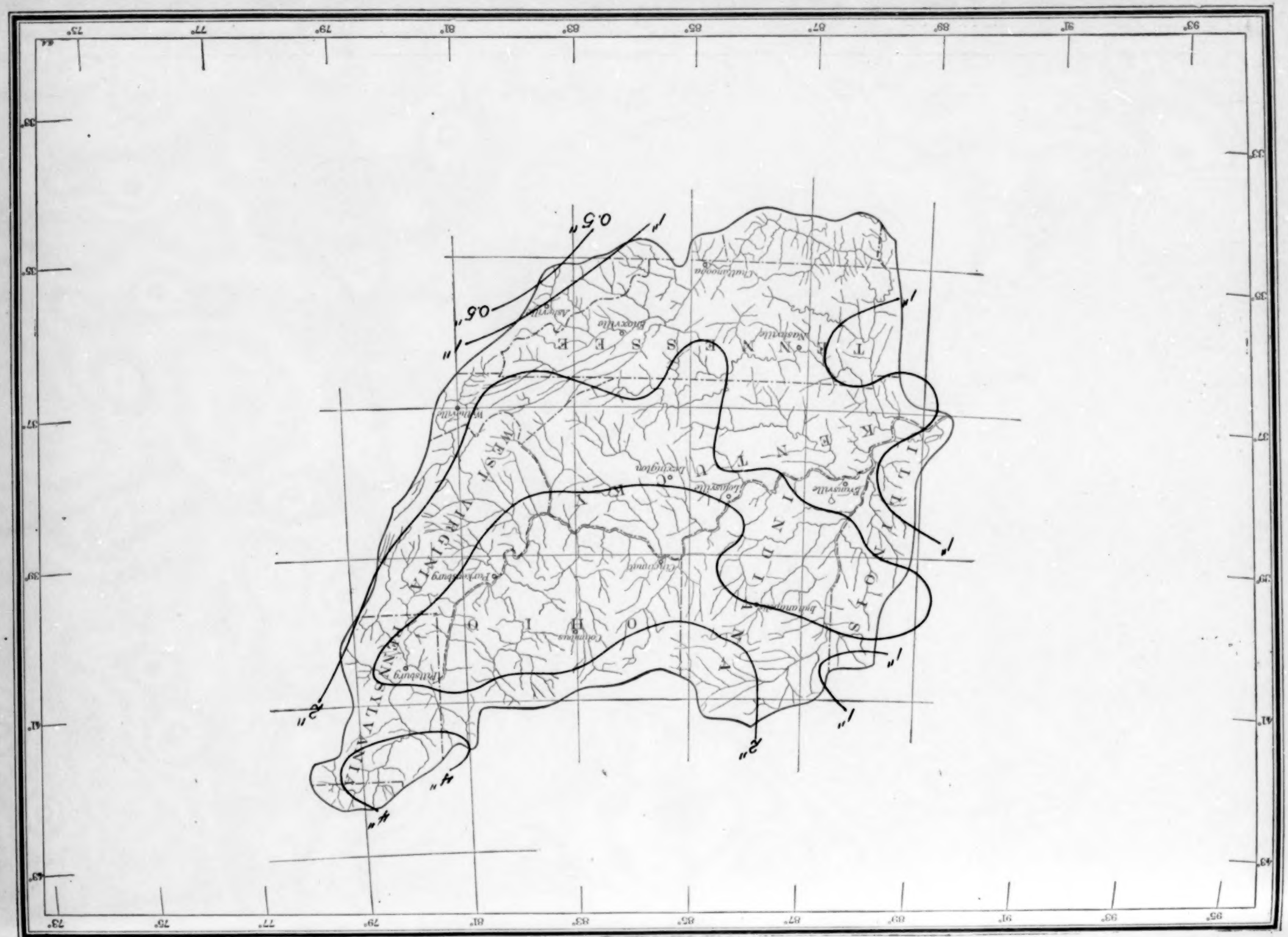


District No. 2.—Total Precipitation, November, 1910.

District No.2.—Departure of the Mean Temperature from the Normal, November, 1910.

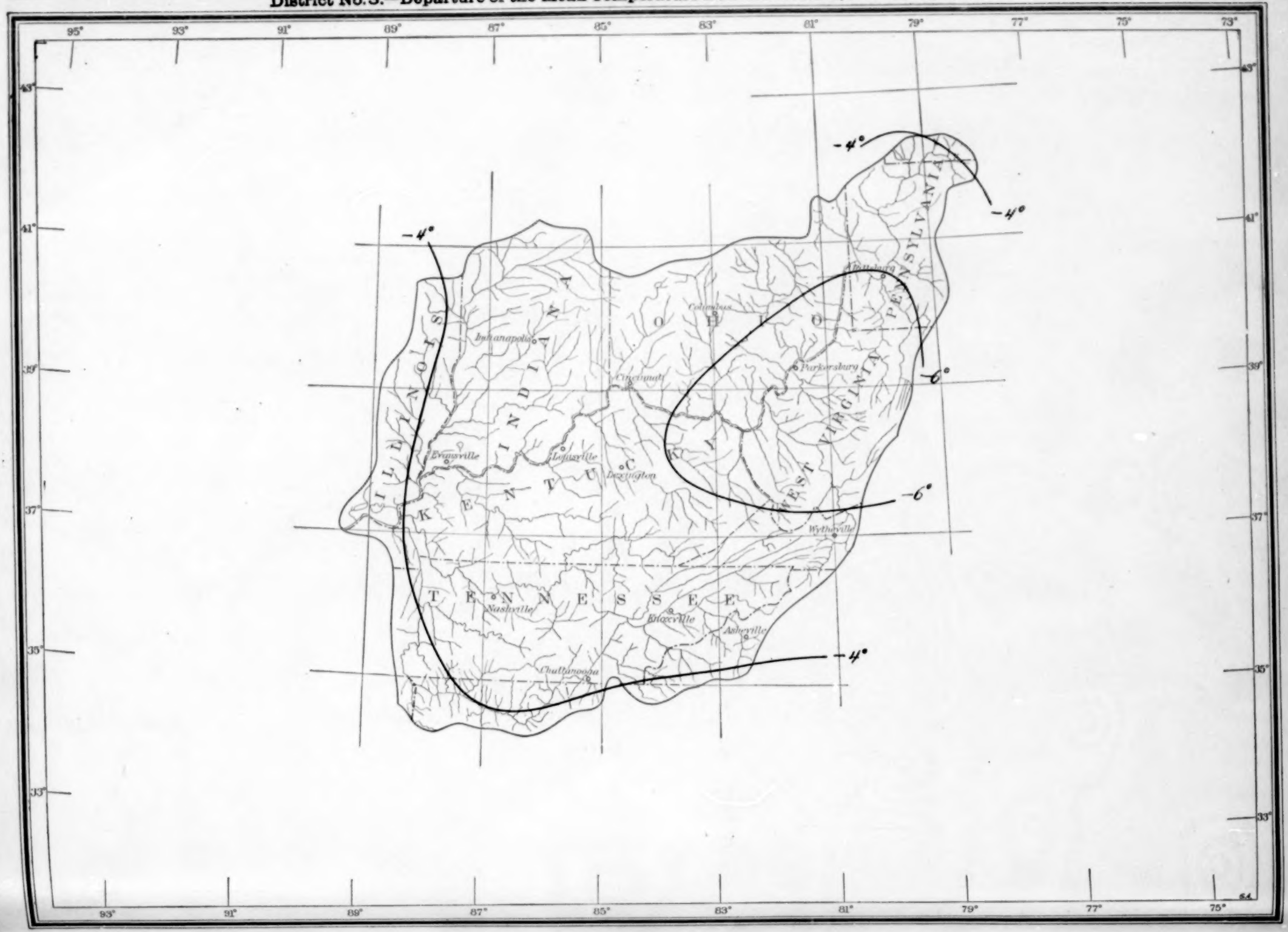


District No.3.—Total Precipitation, November, 1910.



District No. 3.—Total Precipitation, November, 1910.

District No. 3.—Departure of the Mean Temperature from the Normal, November, 1910.



District No. 4.—Total Precipitation, November, 1910.

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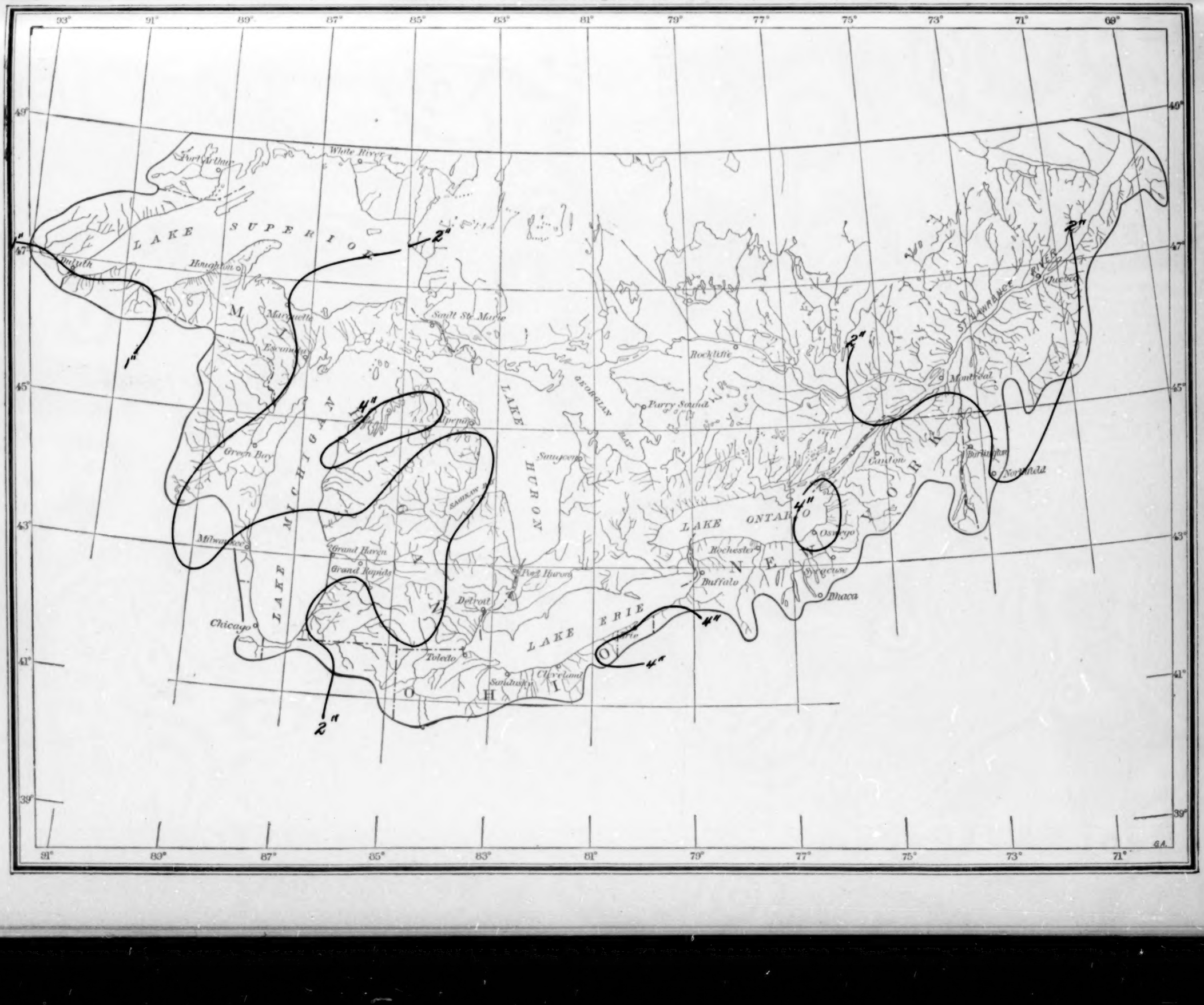
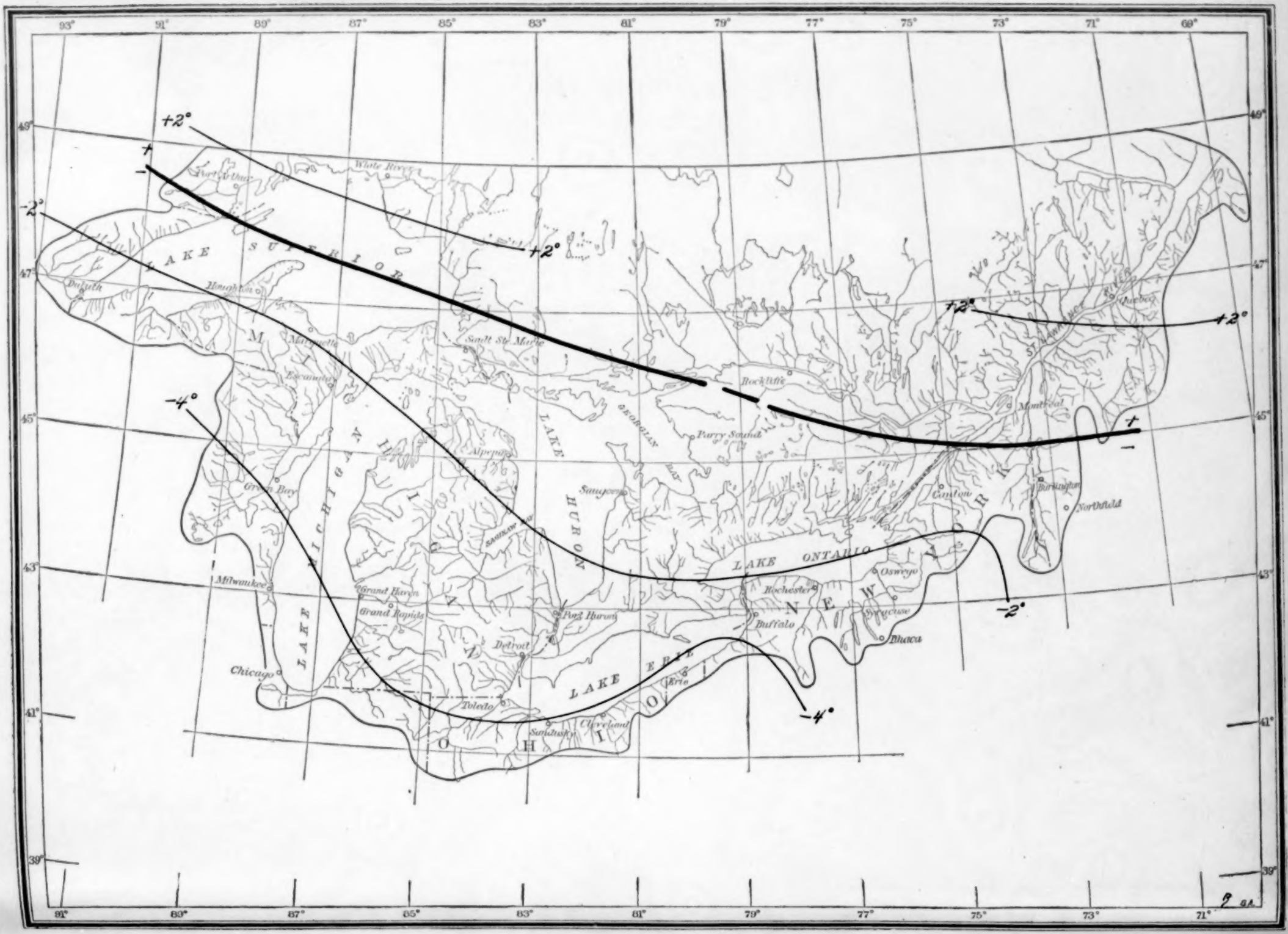


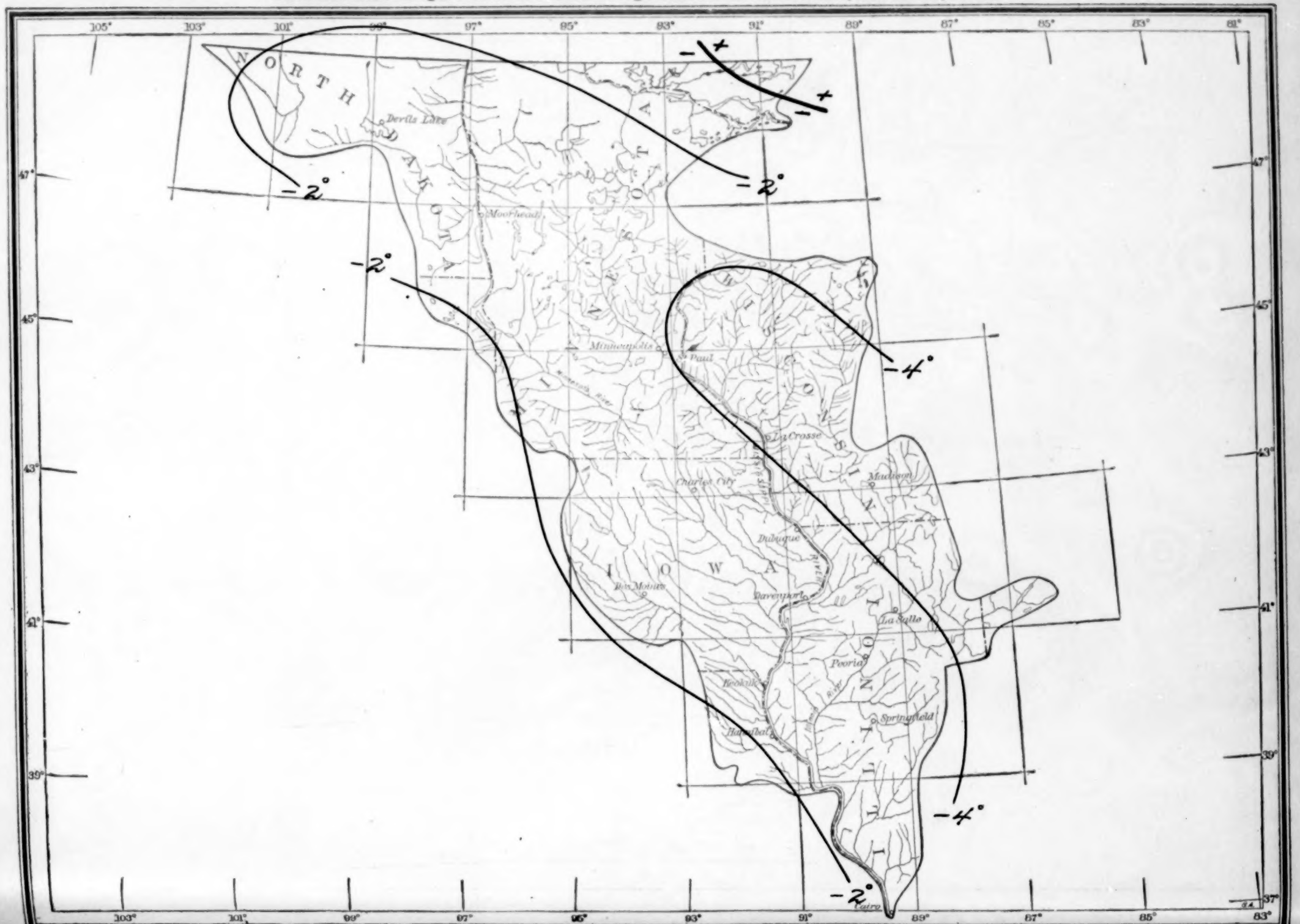
District No. 4.—Departure of the Mean Temperature from the Normal, November, 1910.



District No. 5.—Total Precipitation, November, 1910.

District No. 5.—Total Precipitation, November, 1910.

District No. 5.—Departure of the Mean Temperature from the Normal, November, 1910.



District No. 6.—Total Precipitation, November, 1910.

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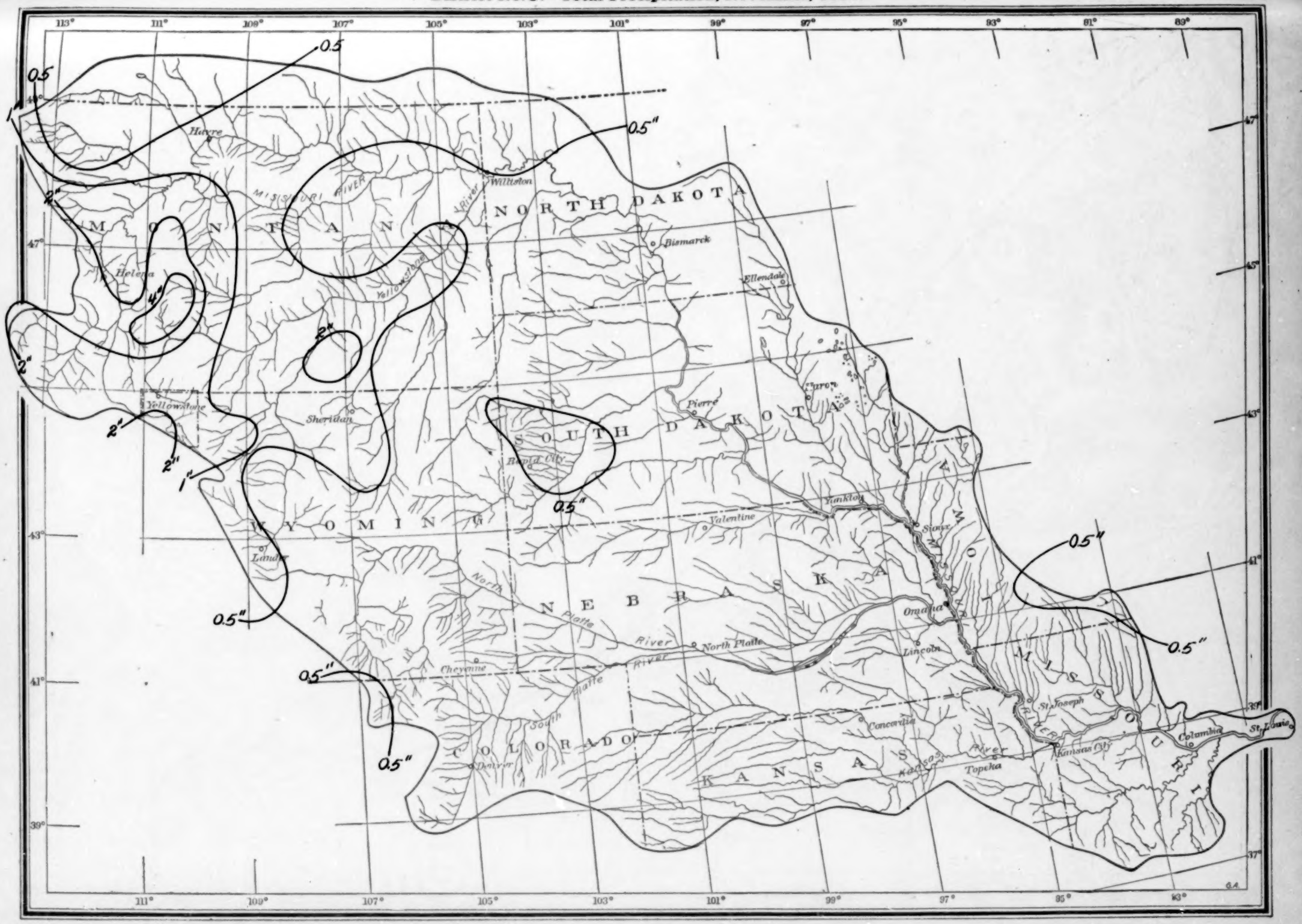
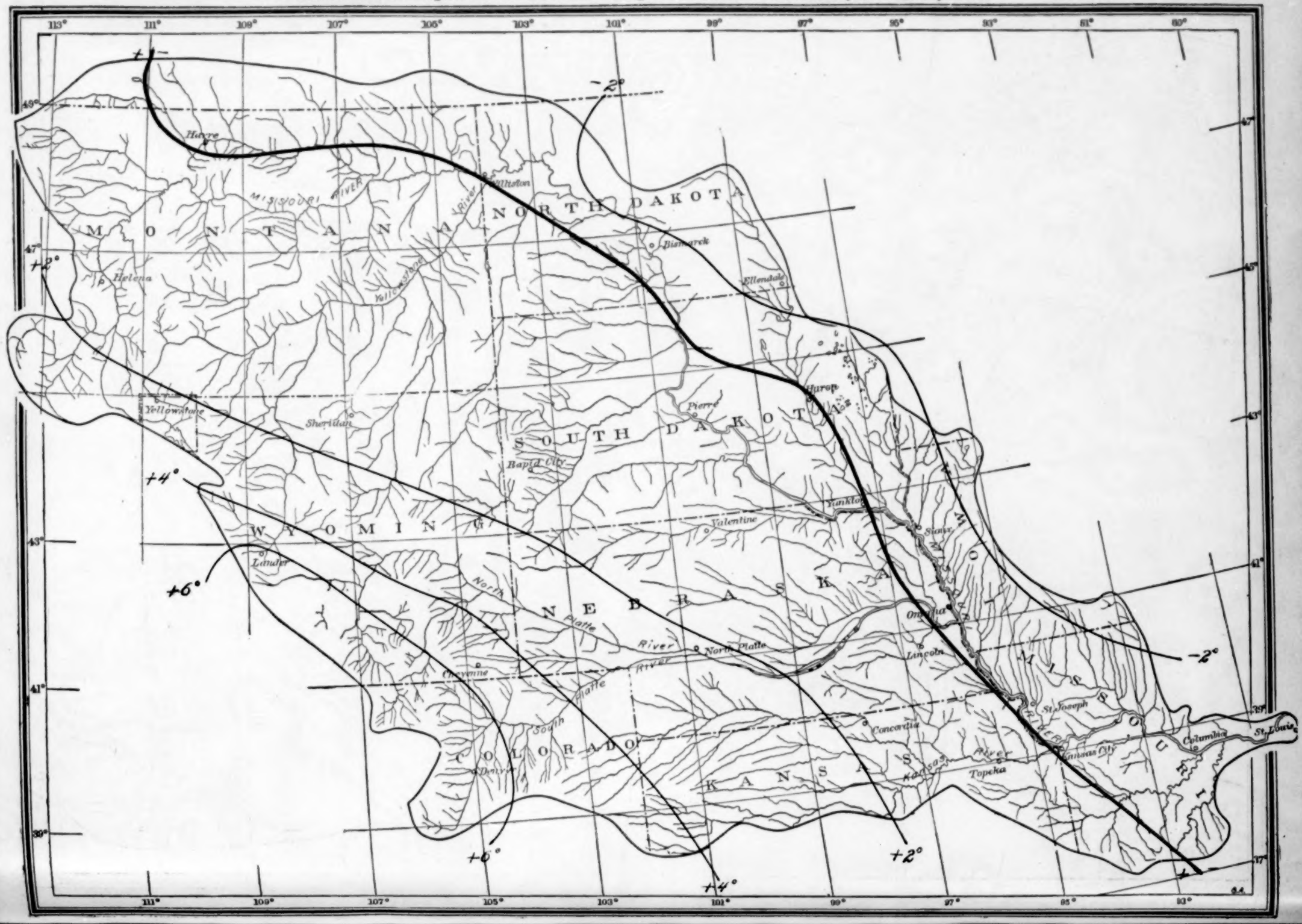
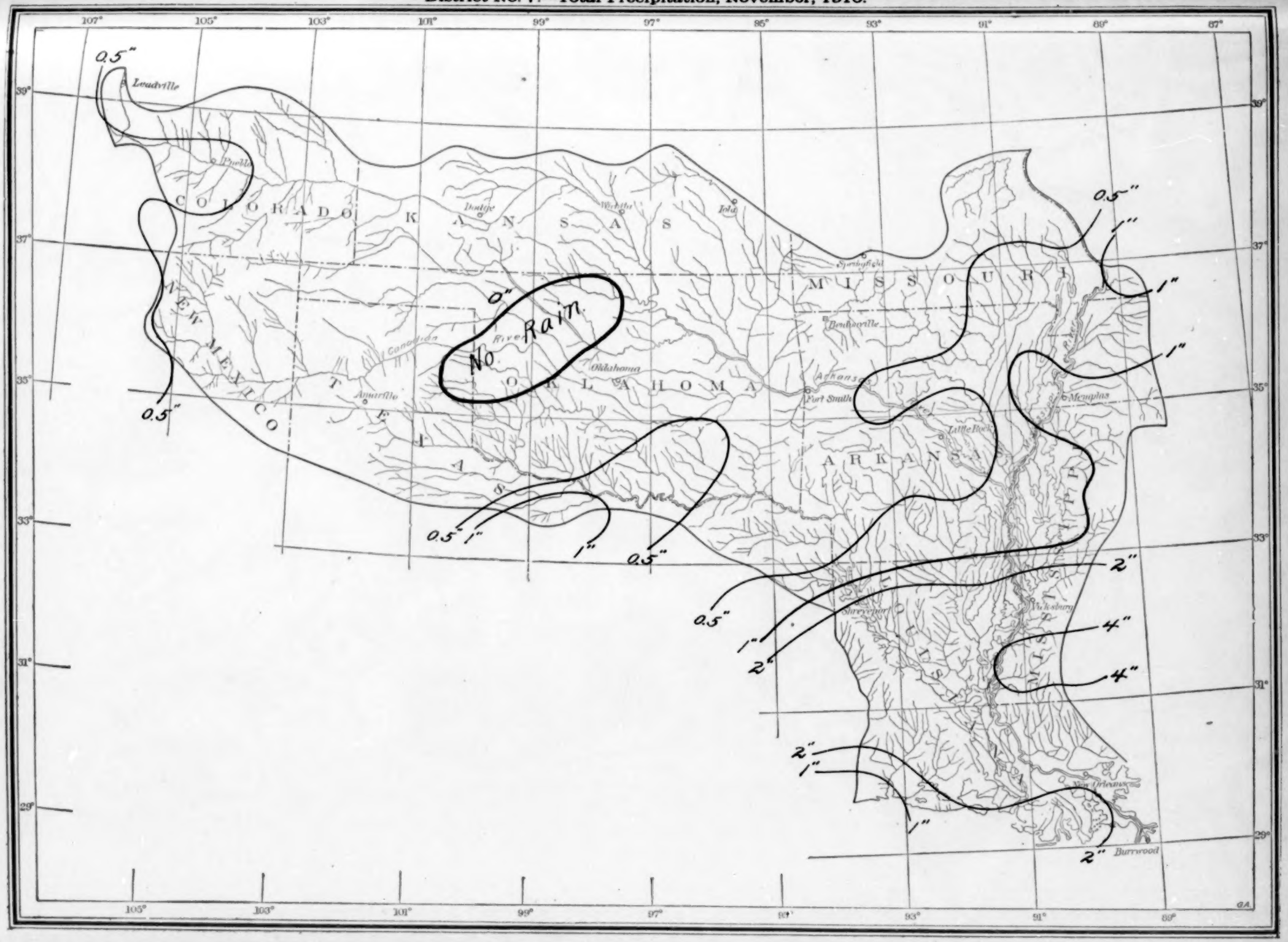


District No.6.—Departure of the Mean Temperature from the Normal, November, 1910.

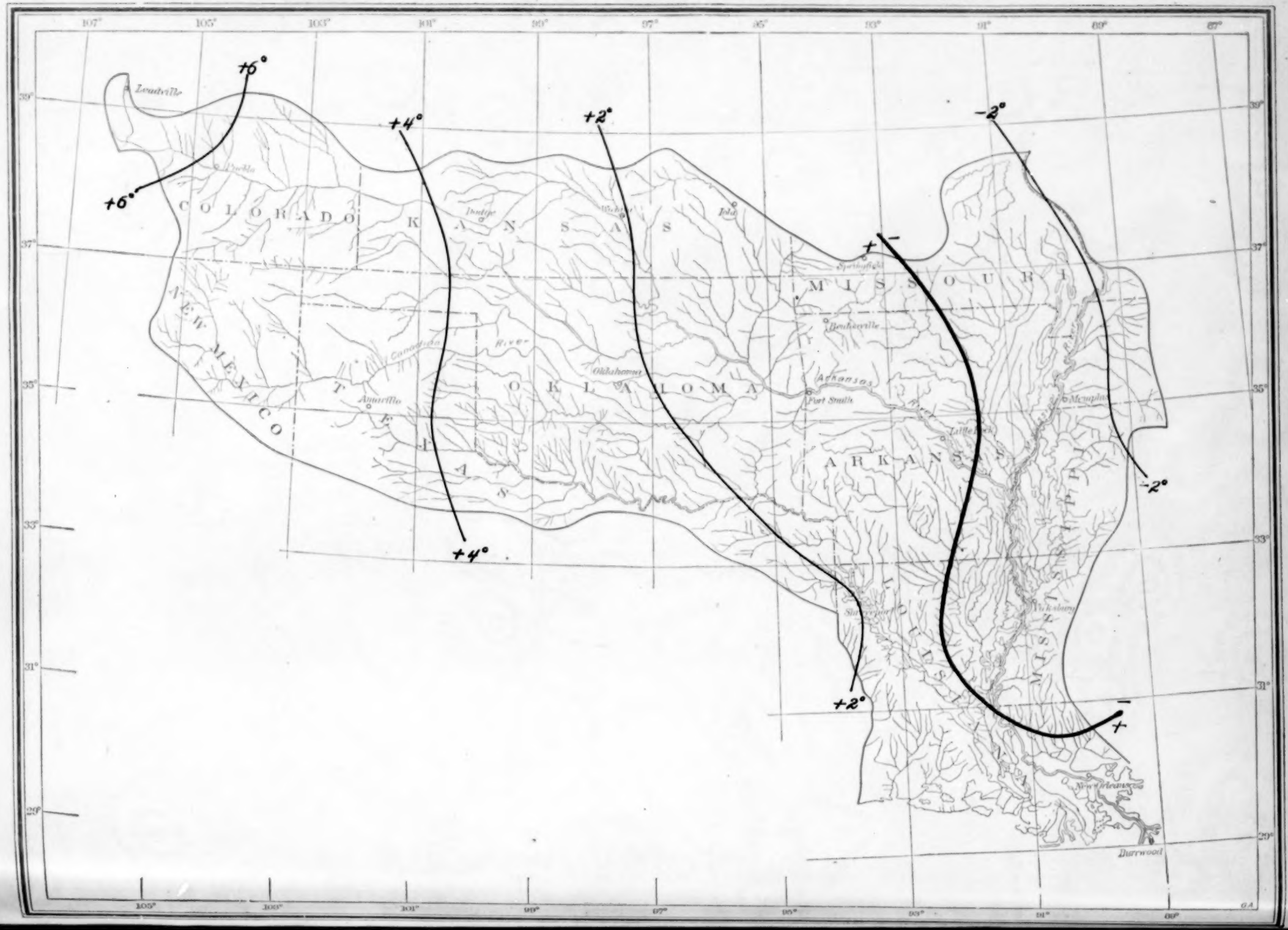


District No. 7.—Total Precipitation, November, 1910.

District No. 7.—Total Precipitation, November, 1910.

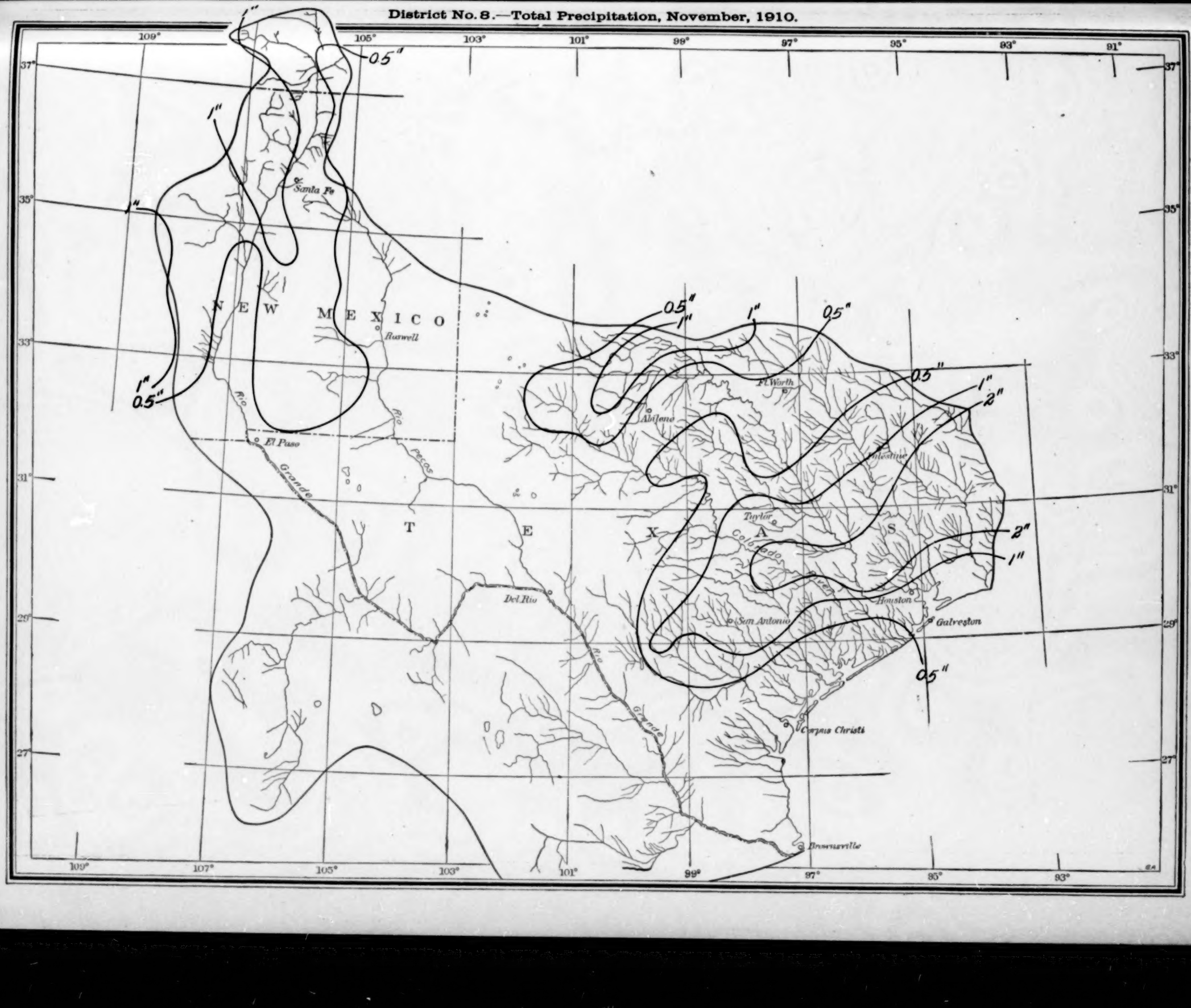


District No.7.—Departure of the Mean Temperature from the Normal, November, 1910.

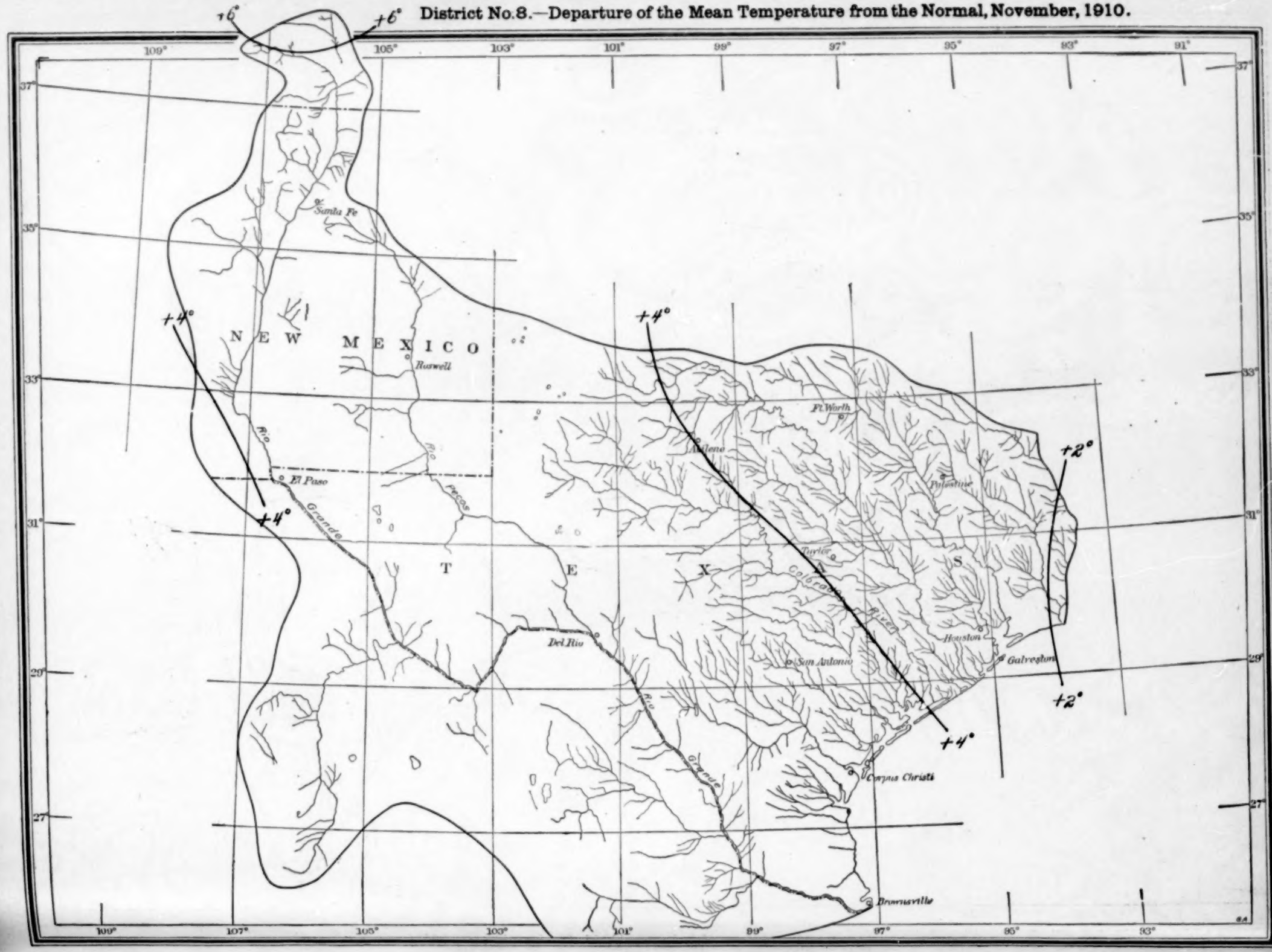


District No. 8.—Total Precipitation, November, 1910.

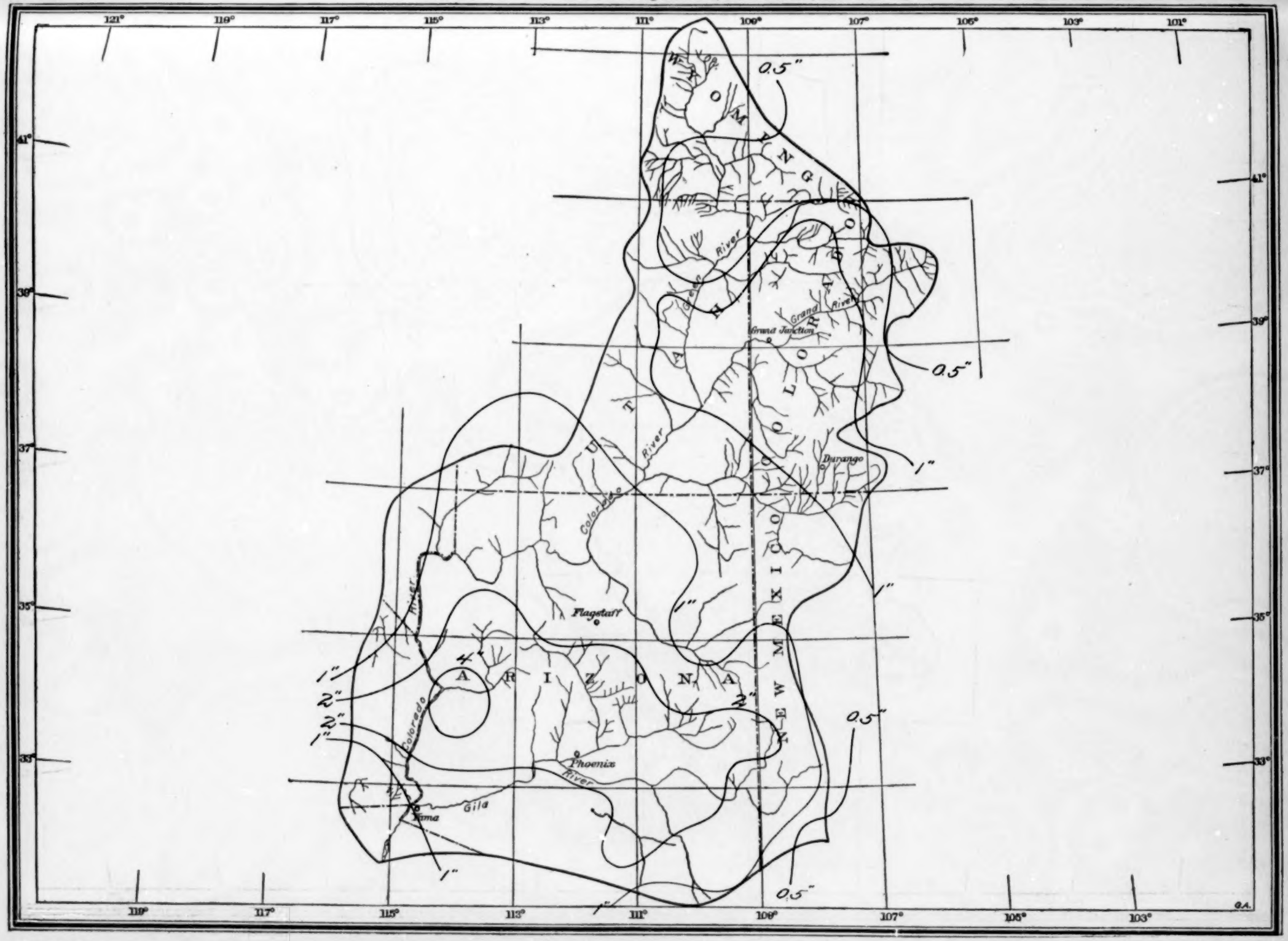
District No. 8.—Total Precipitation, November, 1910.



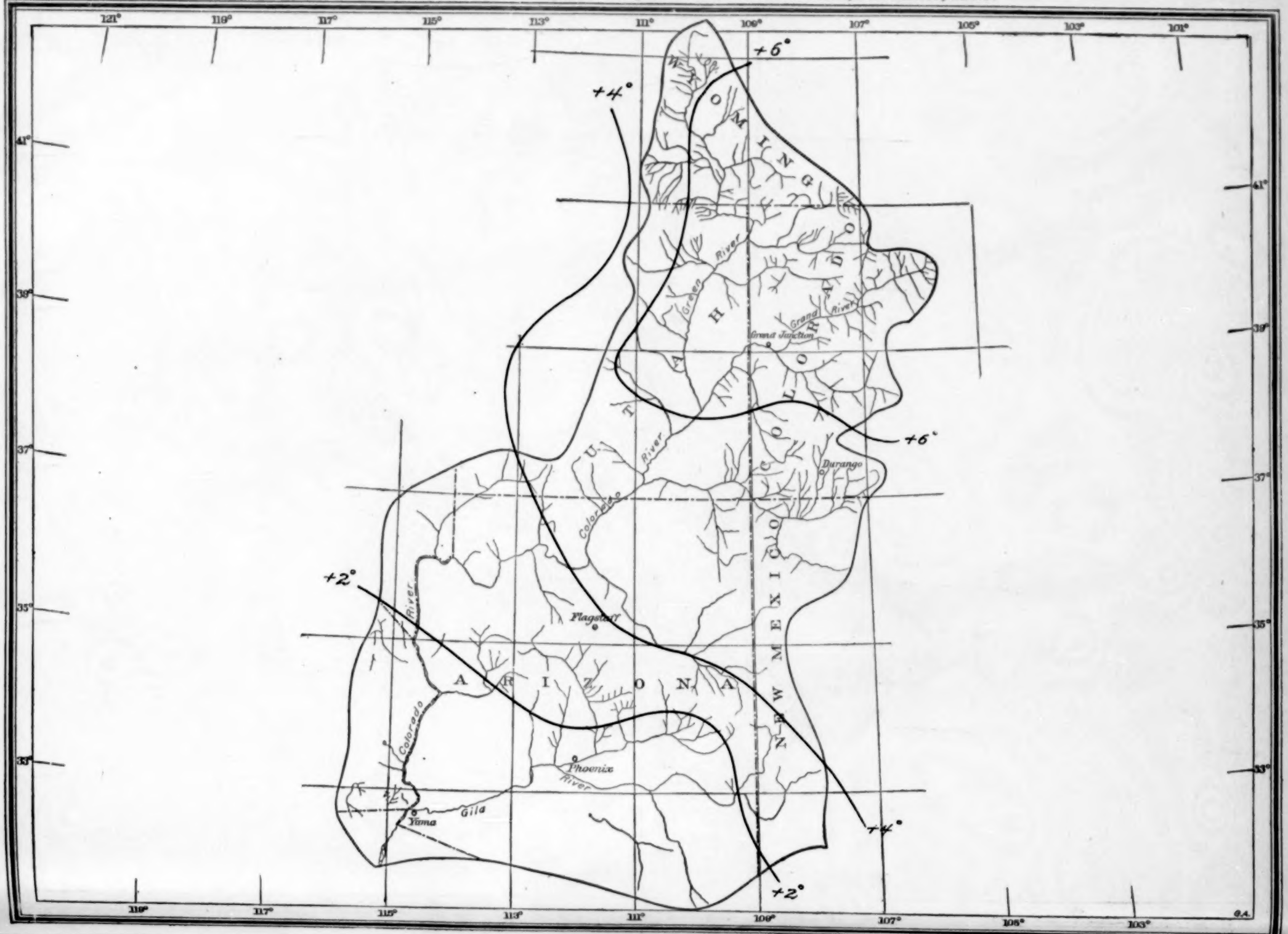
District No. 8.—Departure of the Mean Temperature from the Normal, November, 1910.



District No. 9.—Total Precipitation, November, 1910.

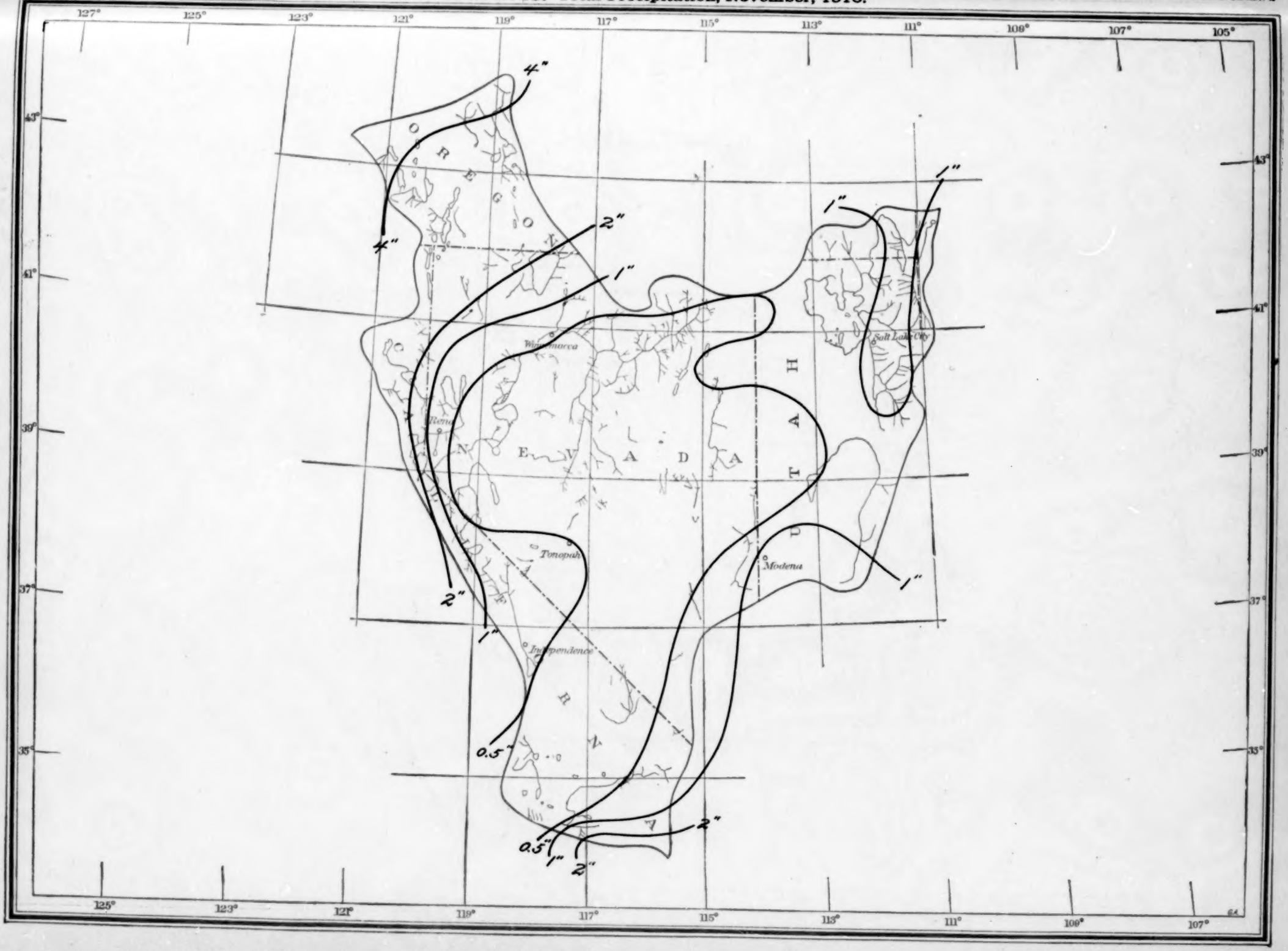

121°
119°
117°
115°
113°
111°
109°
107°
105°
103°
101°
41°
39°
37°
35°
33°
WYOMING
COLORADO
NEW MEXICO
ARIZONA
UTAH
Green River
Grand River
Grand Junction
Durango
Colorado River
Flagstaff
Phoenix
Gila River
Yuma
0.5"
1"
2"
G.A.

District No.9.—Departure of the Mean Temperature from the Normal, November, 1910.

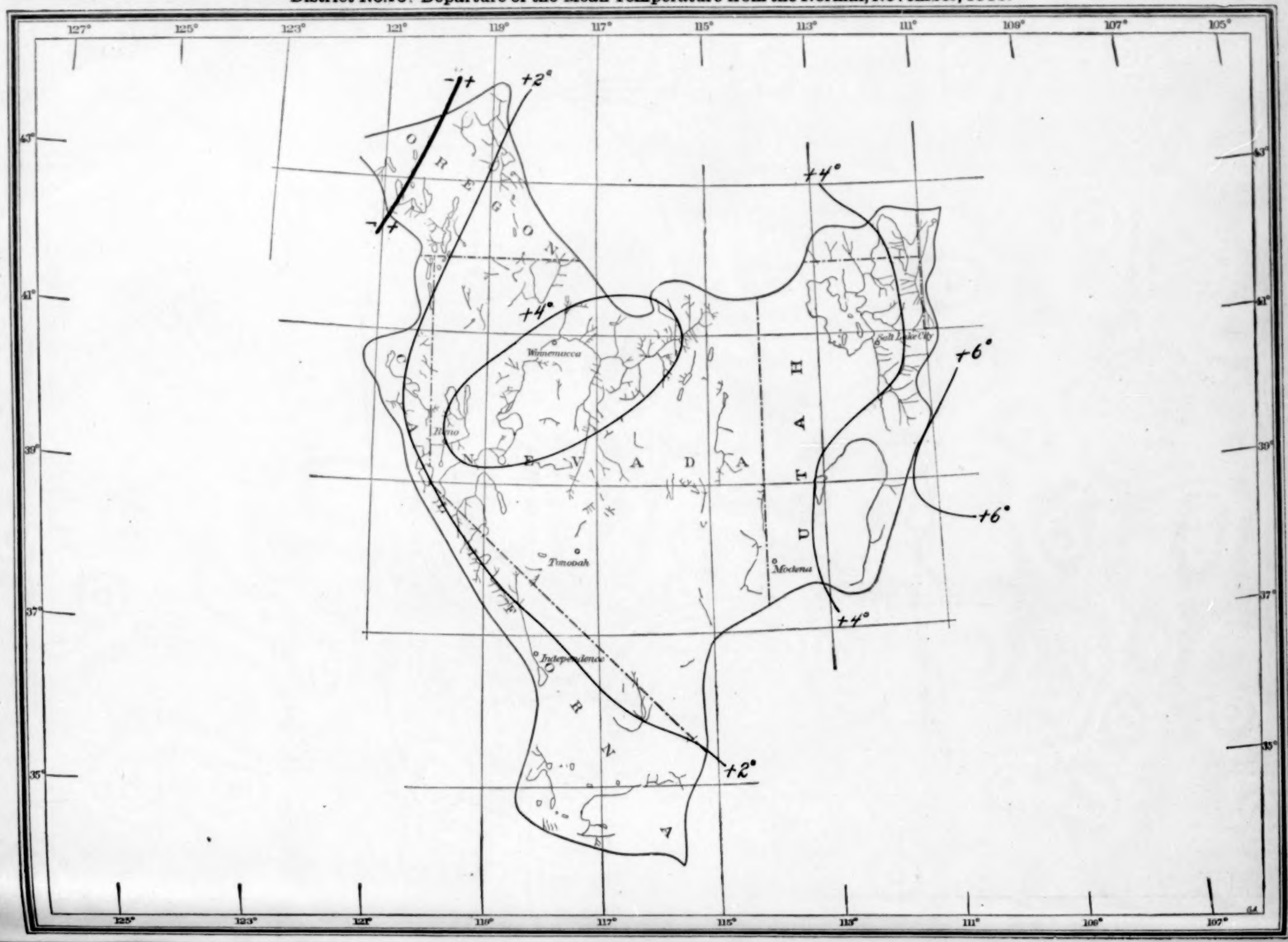


District No.10.—Total Precipitation, November, 1910.

District No.10.—Total Precipitation, November, 1910.

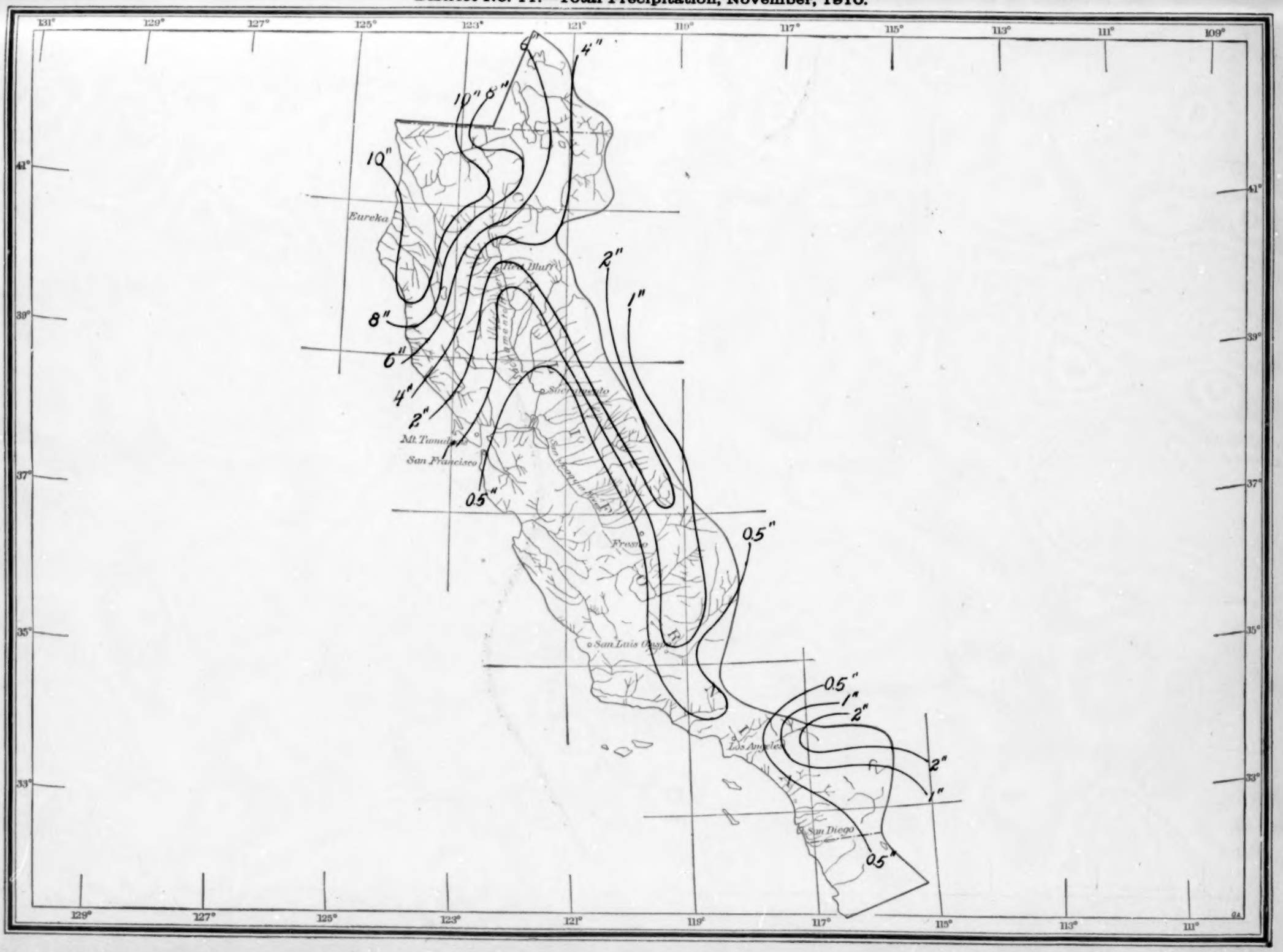


District No.10.—Departure of the Mean Temperature from the Normal, November, 1910.

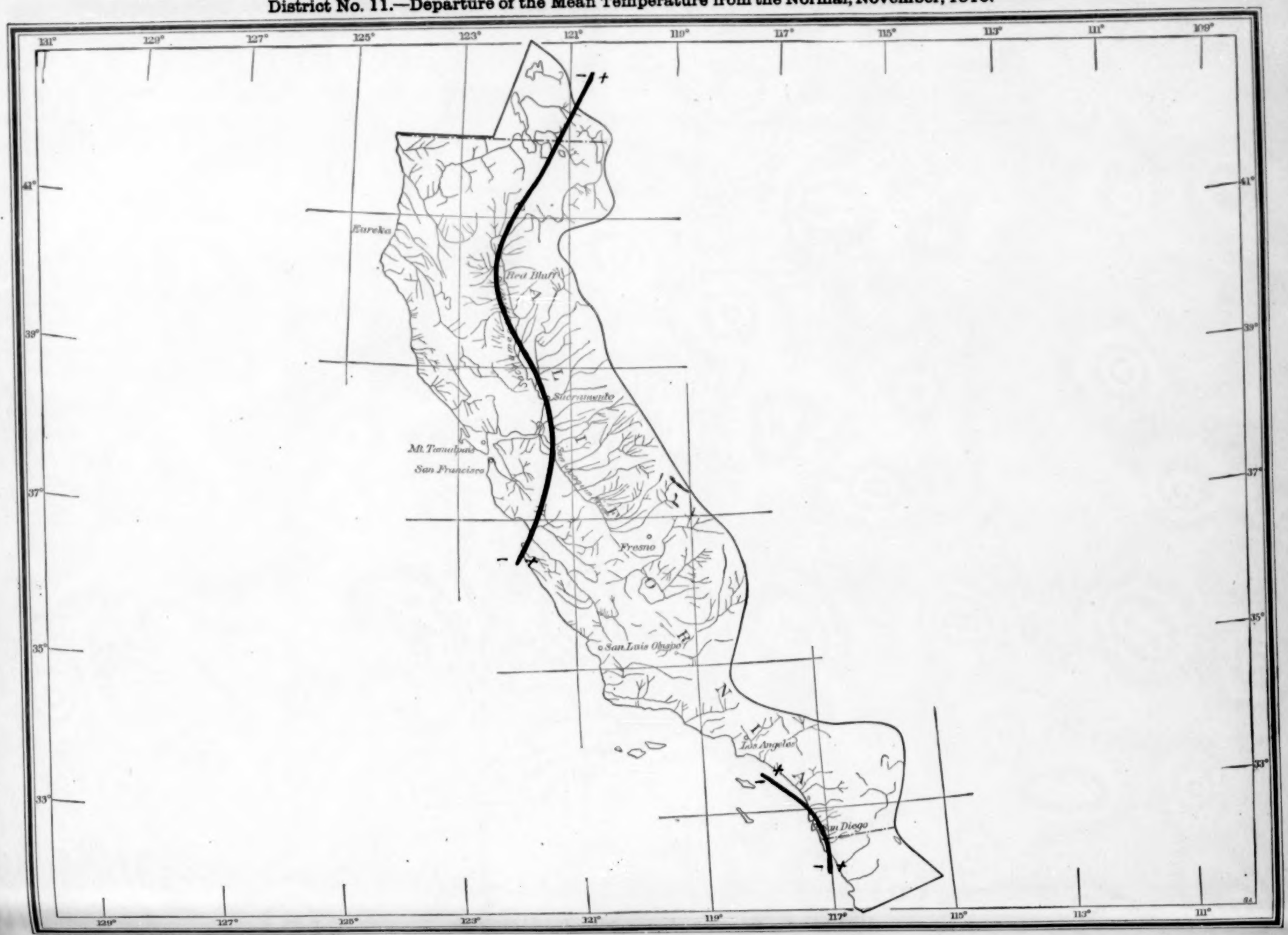


District No. 11.—Total Precipitation, November, 1910.

District No. 11.—Total Precipitation, November, 1910.



District No. 11.—Departure of the Mean Temperature from the Normal, November, 1910.



District No. 12.—Total Precipitation, November, 1910.

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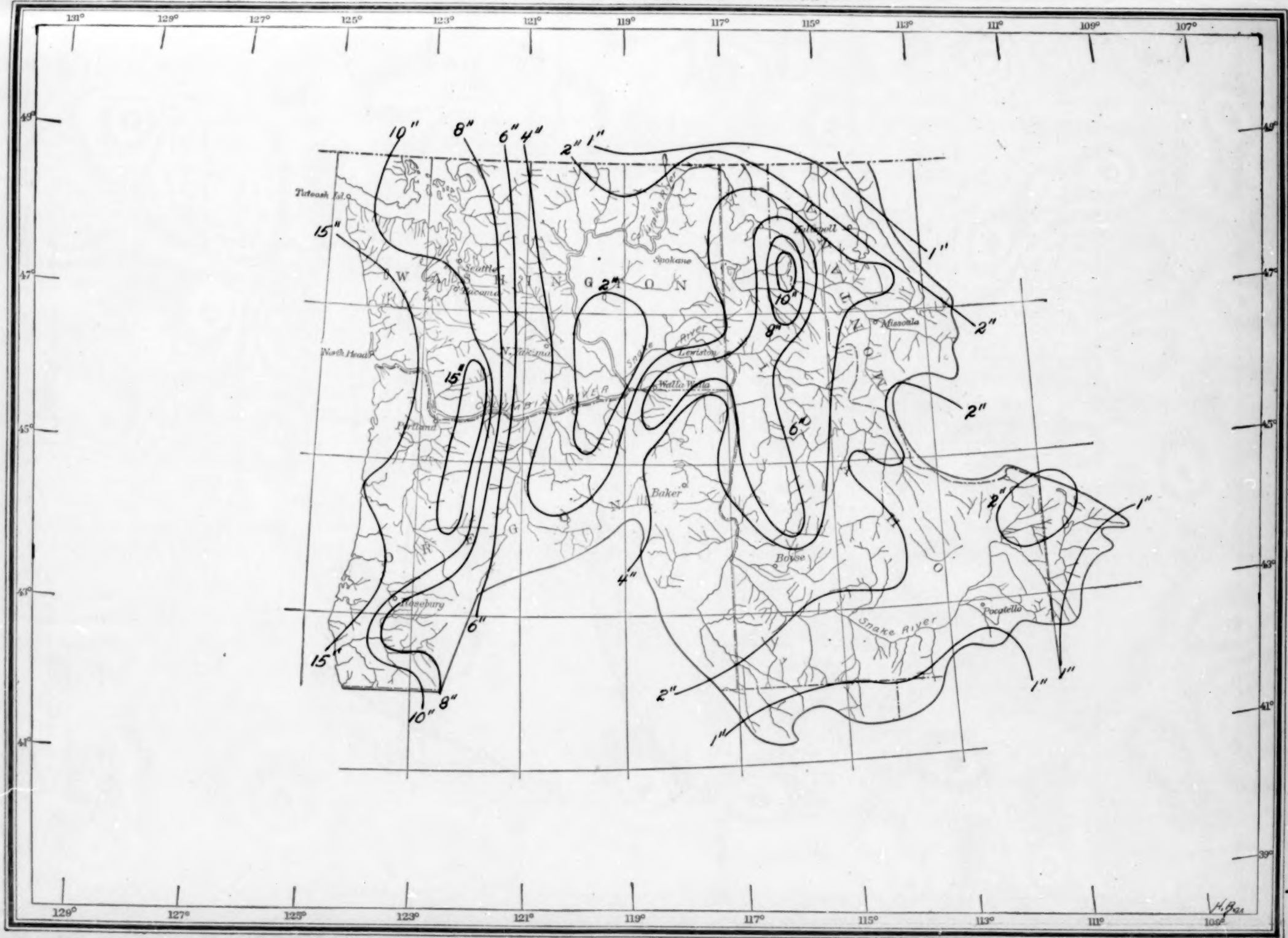
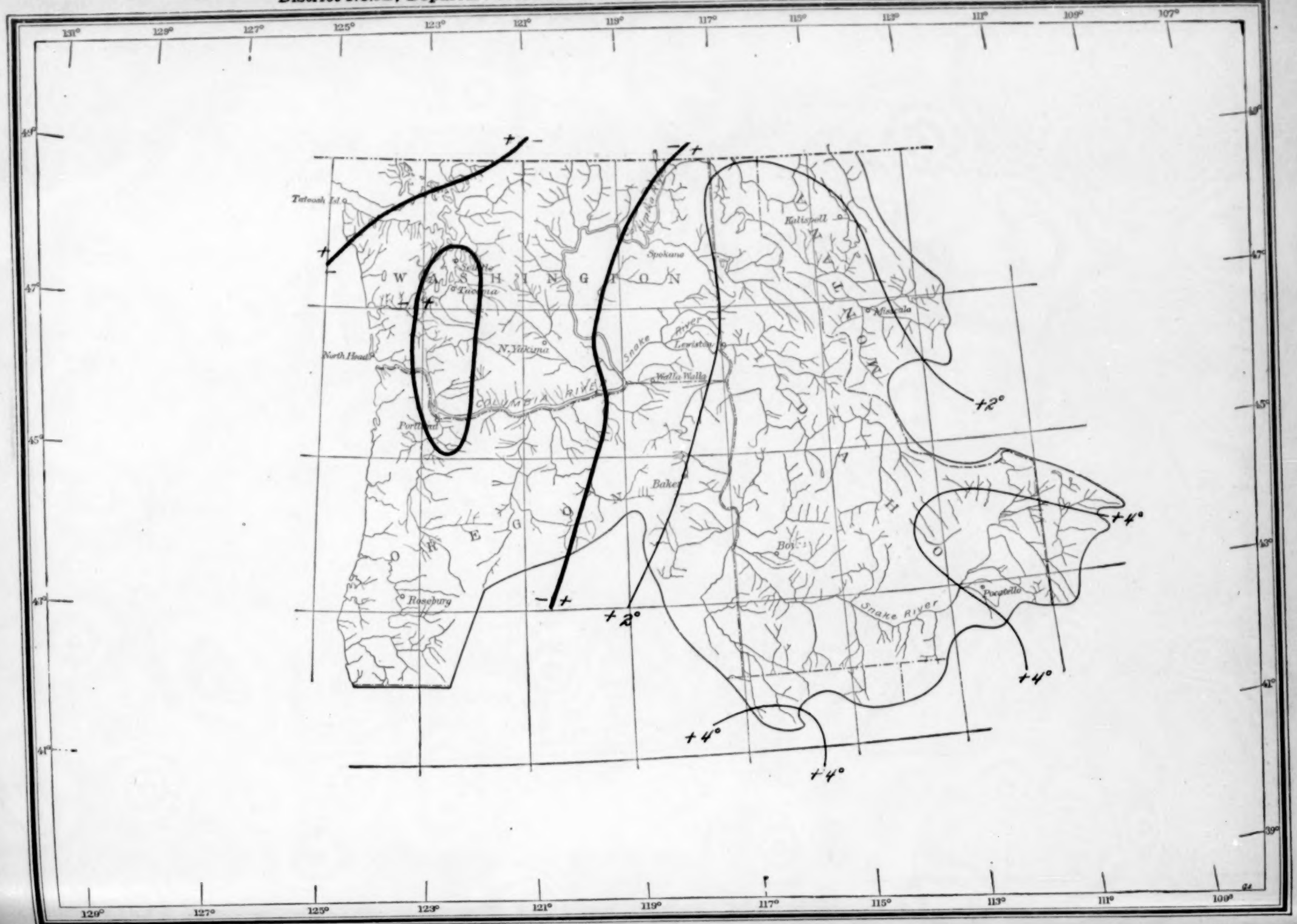
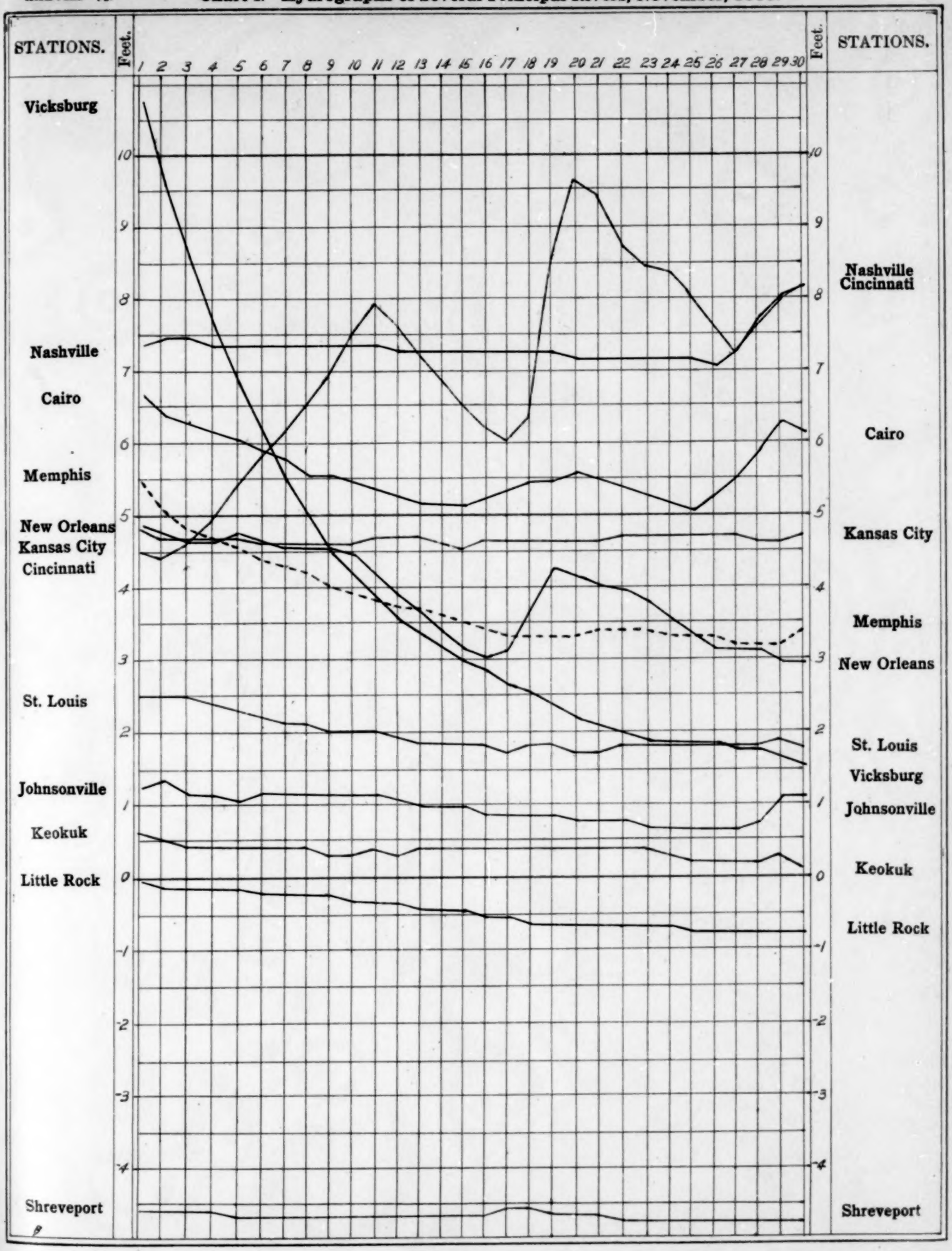


District No.12,–Departure of the Mean Temperature from the Normal, November, 1910.



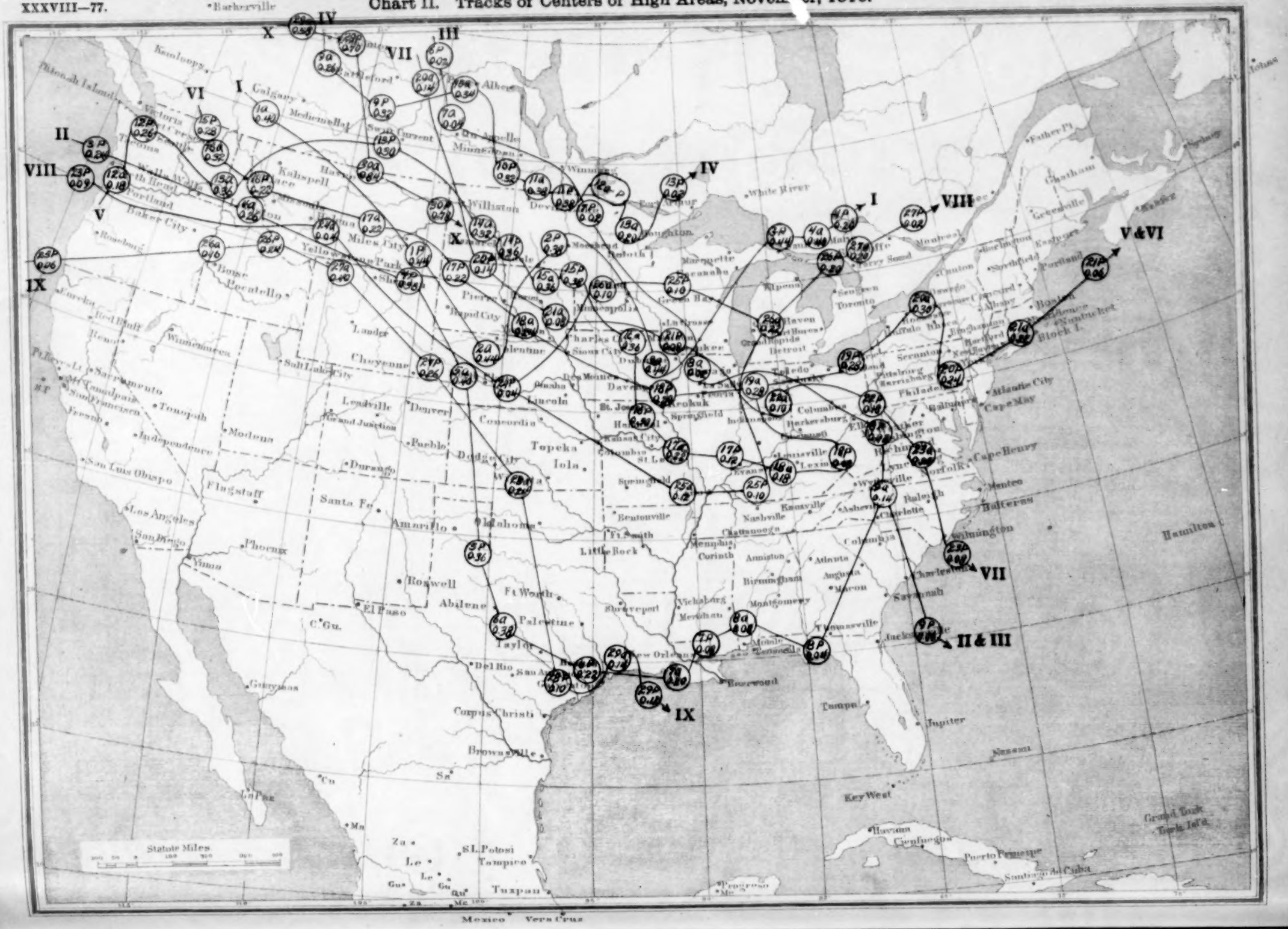
STATIONS.	Mean Temperature.	Departure from Normal.	Highest Temperature.	Date.	Lowest Temperature.	Date.
Kalispell	29.0	−2.0	52	1	6	30
Missoula	30.0	−1.0	52	1	8	30
Lewiston	36.0	−1.0	60	1	14	30
Walla Walla	36.0	−1.0	60	1	14	30
Spokane	30.0	−2.0	52	1	8	30
North Yakima	34.0	−1.0	60	1	12	30
Tacoma	40.0	−1.0	60	1	20	30
Seattle	40.0	−1.0	60	1	20	30
Tatoosh Island	43.0	−1.0	60	1	26	30
Portland	38.0	−1.0	60	1	16	30
Roseburg	38.0	−1.0	60	1	16	30
Baker	28.0	−2.0	52	1	4	30
Boise	30.0	−2.0	52	1	8	30
Pocatello	28.0	−2.0	52	1	4	30
Kamiah	30.0	−1.0	52	1	8	30
Lewiston	36.0	−1.0	60	1	14	30
Walla Walla	36.0	−1.0	60	1	14	30
Spokane	30.0	−2.0	52	1	8	30
North Yakima	34.0	−1.0	60	1	12	30
Tacoma	40.0	−1.0	60	1	20	30
Seattle	40.0	−1.0	60	1	20	30
Tatoosh Island	43.0	−1.0	60	1	26	30
Portland	38.0	−1.0	60	1	16	30
Roseburg	38.0	−1.0	60	1	16	30
Baker	28.0	−2.0	52	1	4	30
Boise	30.0	−2.0	52	1	8	30
Pocatello	28.0	−2.0	52	1	4	30
Kamiah	30.0	−1.0	52	1	8	30

Chart I. Hydrographs of Several Principal Rivers, November, 1910.



Barkerville

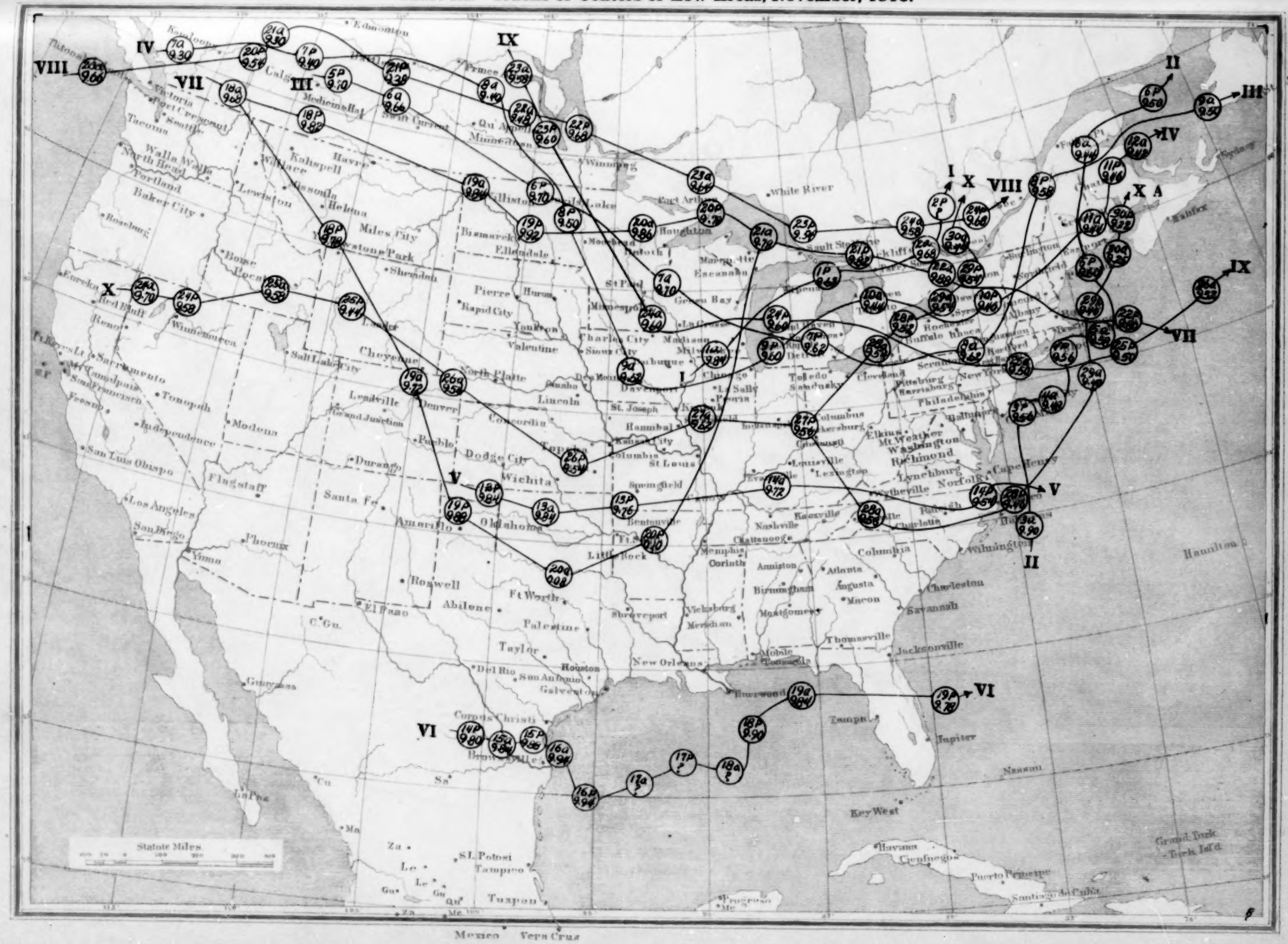
Chart II. Tracks of Centers of High Areas, November, 1910.



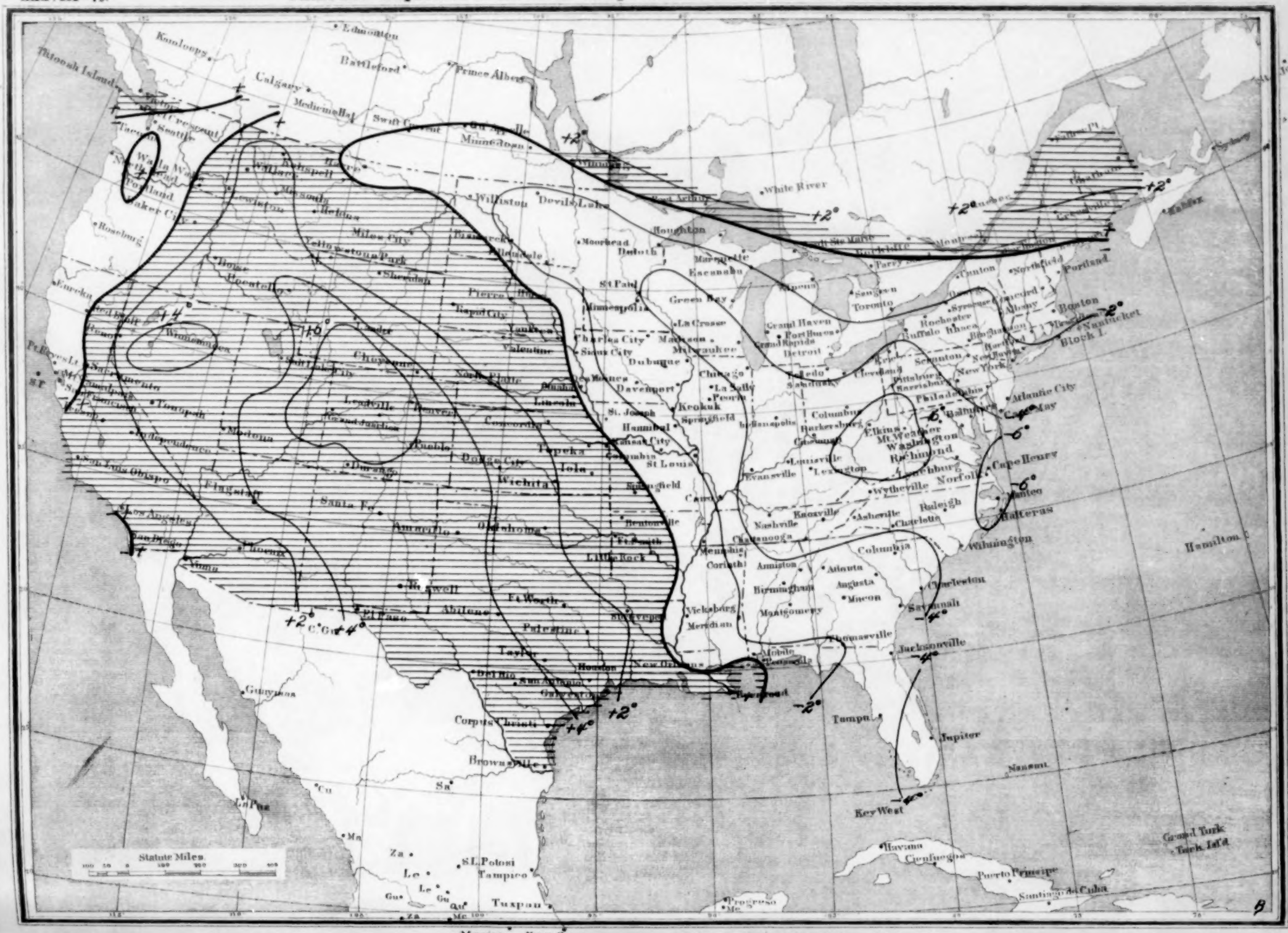
Barkerville

Chart III. Tracks of Centers of Low Areas, November, 1910.

Chart III. Tracks of Centers of Low Areas, November, 1910.

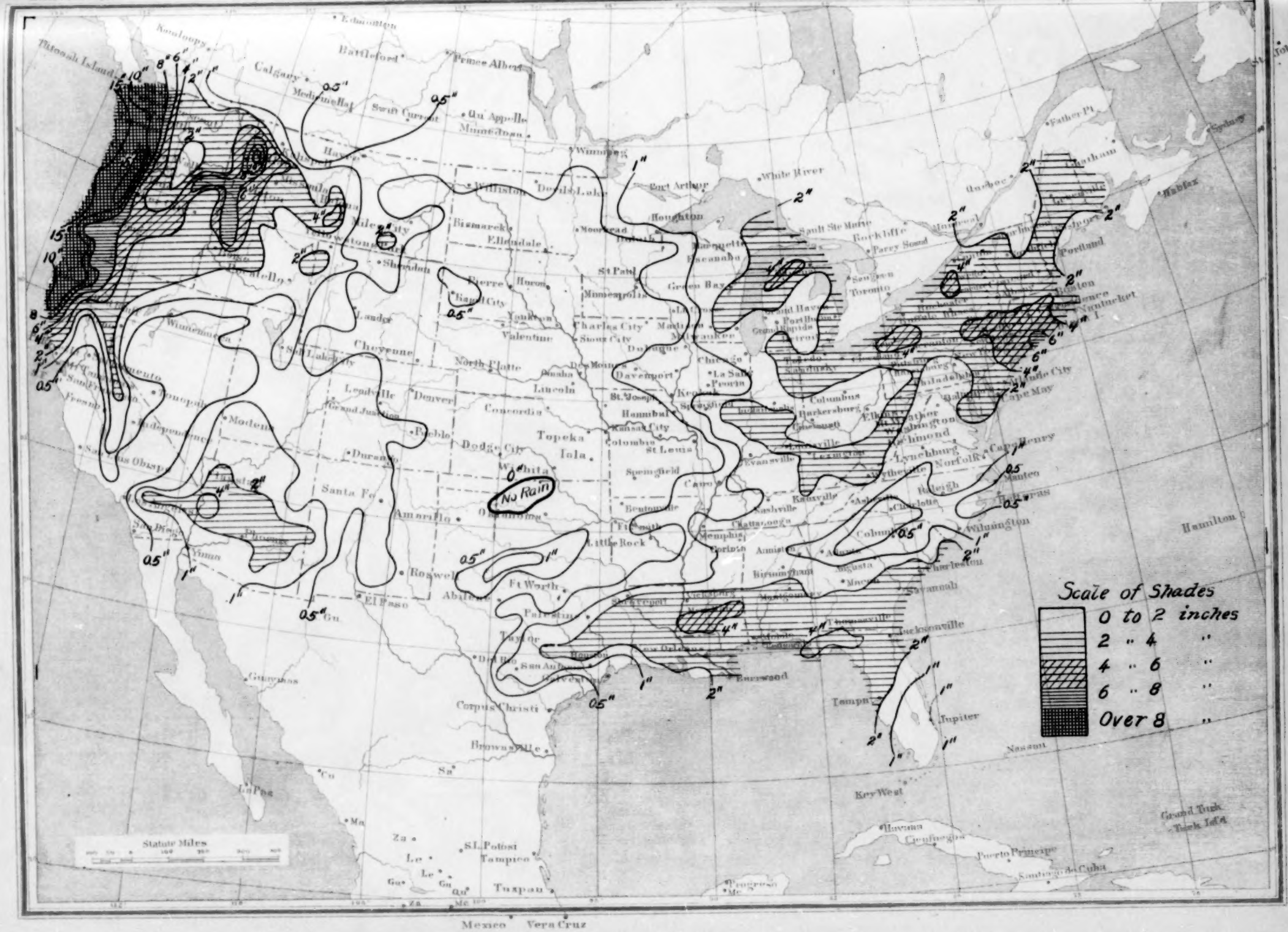


Barkerville Chart IV. Departure of the Mean Temperature from the Normal, November, 1910.

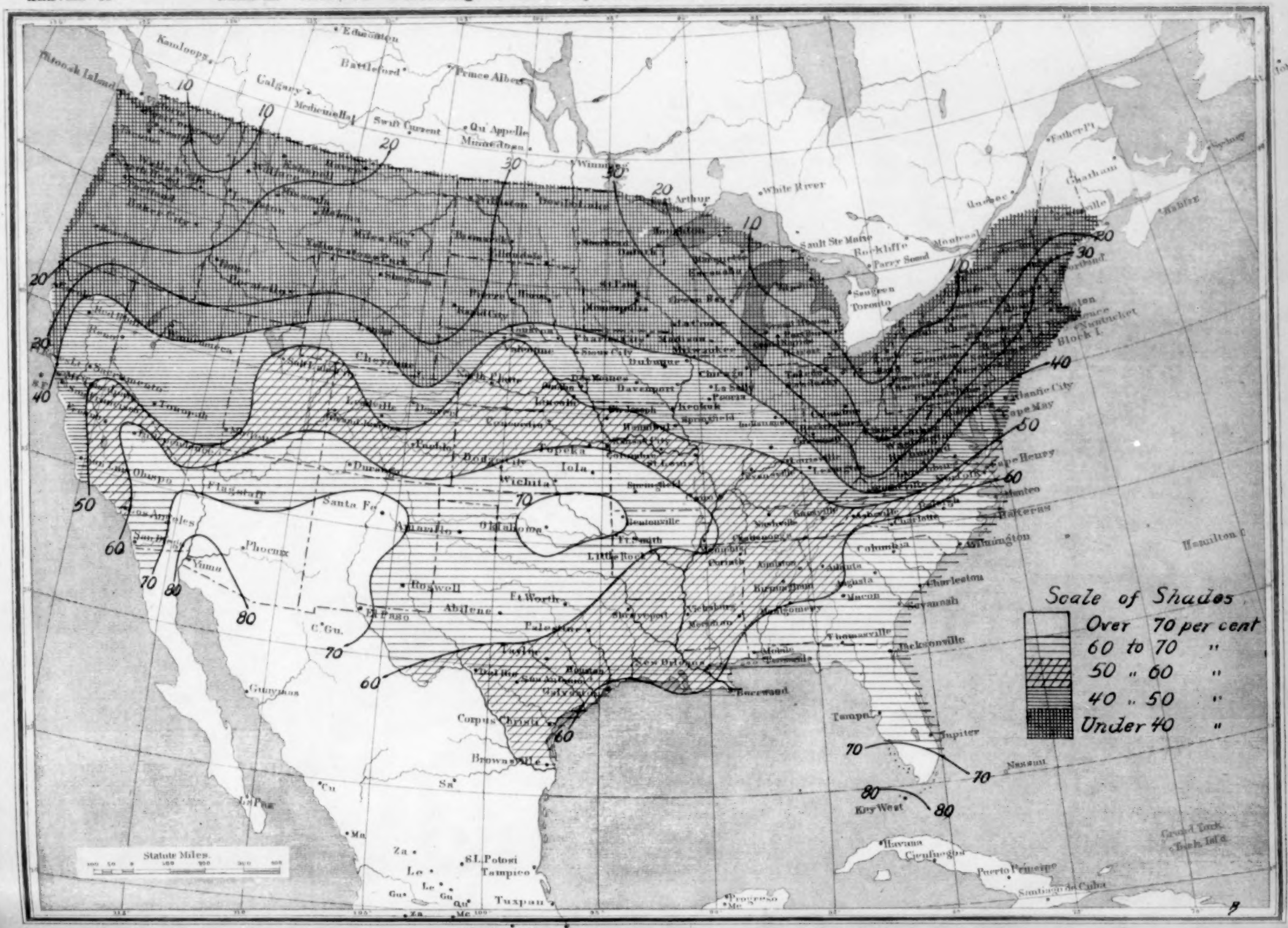


Barkerville Chart V. Total Precipitation, November, 1910.

Chart V. Total Precipitation, November, 1910.



•Barkerville **Chart VI. Percentage of Clear Sky between Sunrise and Sunset, November, 1910.**



•Barkerville **Chart VII. Isobars and Isotherms at Sea Level; Prevailing Winds, November, 1910.**

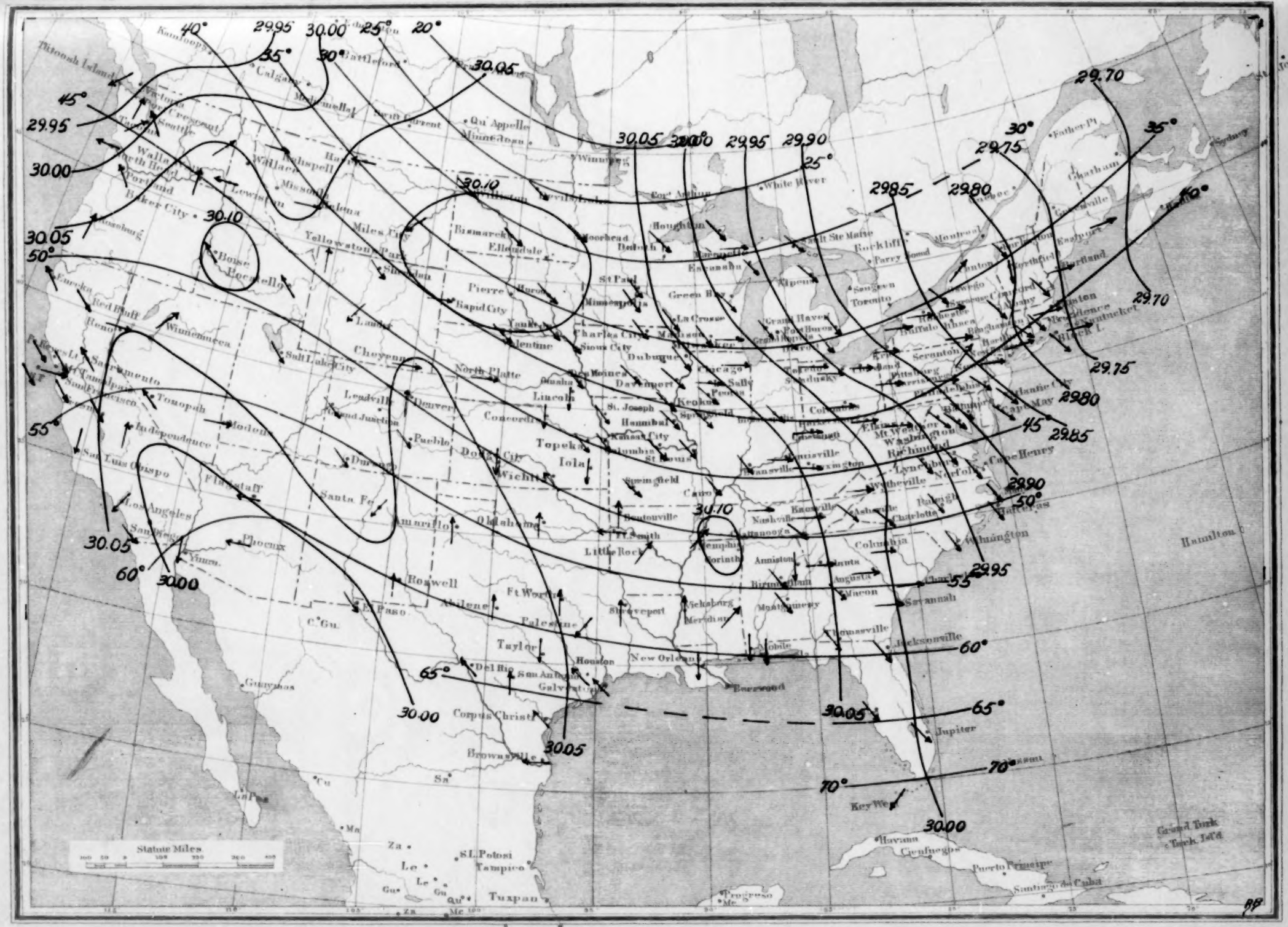



Chart VII. Isobars and Isotherms at Sea Level; Prevailing Winds, November, 1910.